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Reflections on Twenty Years in Practice*

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TWO of the most stimulating books it has ever been my privilege to read are the autobiography of Herbert Spencer and the "Education of Henry Adams." In the one a great philosopher traces the development of his mind to that stage where it formulates the idea of cosmic unity in all sciences. In the other a mental diletante turns the searchlight of analysis on his own education and arrives at the conclusion that the progress of the world is due to a dynamic force measurable by geometric progression.

By these two classic examples I am encouraged to believe that mental introspection is not fruitless and that from one's own cogitations may come broad philosophical tenets or formulæ helpful to future development. If osteopathy is a science it must be a unit in the Unity of all Sciences; it must have a dynamic force of its own to differentiate it from other sciences. And if osteopathy is to live and have a place in the advancement of civilization its progress must be in a geometric ratio.

The dynamic force that makes osteopathy a true science is not the fact that we eschew wholly or partially "chemical intake" in order to restore normal physiological function. Faith healers and mental scientists of all colors and persuasions could qualify under that demarkation. Nor can osteopathy qualify as a science because we rely "mainly" on mechanical adjustment of body tissue for restoration of normal structure and function.

We must, necessarily must, go further and say that the relation of structure and function is absolute, that all disease of the body is due to abnormal adjustment of macroscopic or microscopic body tissue. Admittedly this is a tenet that has not yet been proved. But lack of proof is no valid argument against the principle.

In physics we know that, given a power and a lever and a fulcrum, any weight can be moved. The fact that certain weights or resistances have not been overcome by leverage devices does not invalidate the formula of physics. Though lacking the proof of all-embracing application the principle stands because it is founded on mathematical certainty. And mathematical certainty equals Infinite Intelligence, where rests the final determination of all sciences.

The progress of physics as a science today depends not on the proof but rather on the application of the principle involved in the lever. Just so, the progress of osteopathy depends not on all-embracing proof of the absolute relation of structure and function but rather on the broadening of

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the application of this tenet. In this way alone may we hope for that geometrical ratio of growth which marks the progress of civilization and without which we must be lost.

But we should understand that our growth is, in order to fill the measure of a science, to be through the development of a principle and not through the inclusion of principles foreign or antagonistic to our absolute relation of structure and function. For this reason those laws and those courses of study which permit osteopaths to deviate in their practice from the application of the mechanical principle are potent with possible harm. Not that such laws and such knowledge handicap the activities of the individual, because the contrary is true. But in the progress of the world, in the evolution of types, thousands of individuals are handicapped unto extinction in order that the perfect type may be produced for future service and survival.

The validity of this conclusion to my mind is established by the fact that in twenty years' experience I have yet to see one new application of the mechanical principle developed by any man who vitiated this principle with a "chemical intake," beyond food. But let us look at this matter in a larger way. Through eight years service on the Educational Committee it was my duty to watch the teachings of the colleges and to note the work of the college product. I have watched the growth and development of osteopathy with much interest, particularly the principle of absolute relation between structure and function. For twenty years technique advancement with its consequent broadening has been solely due to a more intensified application of the mechanical principle in both diagnosis and therapy. We understand far more of the detail or finer features of physiologic activity, though the underlying truth of bed-rock principles has remained unchallenged. Indeed, every advancement of biologic research has still further substantiated osteopathic tenets.

Such things as drugs and allied properties have not developed now or brought out a better technique, a more definite diagnosis a book on infantile paralysis, a protest vaccination, a possible cause for cancer, a method of removing cataract, a means to make the blind to see and the deaf to hear. It is straight, intensified osteopathy that has taught us a better understanding of the lymphatics as a means of combating infections.

I call your attention to some of the important features that are daily making osteopathy a still more potent measure. Yet nevertheless there are dangers to be avoided if we would fulfil our scientific destiny by geometrically increasing the dynamic force of our profession in the progress of civilization. We must keep our lines snug and fit for it is exceedingly easy to foul them.

It is pleasant to reflect upon the real growth of our principles in their application to disease during the past twenty years. Many of you no doubt recall our literature of two decades ago. We talked and wrote then almost exclusively of headache, constipation, rheumatism and neuralgia—all old chronic conditions where drugs were admitted failures.

Compare these kindergarten subjects with our literature of today wherein we boldly discuss the effect of the mechanical principle on cancer; the removal of cataract; the correction of the organs of sight and hearing; the action of specifically applied mechanical stimulation on the malarial plasmodium, on bacillus catarrhalis, on streptococcic and staphylococcic infections—in fact on the whole layout of acute infections by known or unknown agents. And the wonderful part of our progress is that the public now listens to what we say. By establishing the mechanical principle in the minds of the public we have done no less a part in the advancement of civilization than did Watt with his steam engine.

As I recall the facts our profession was represented twenty years ago by not over one-thousand osteopaths, today by at least seven thousand. Of course we cannot hope for a geometric increase in number until every human being civilized and savage has a D.O. degree. But within the next twenty years our number may possibly go to fifty thousand. It is a goal worth striving for.

Our progress, however, will not depend on our numbers. It will depend, rather, upon that Gideon band of our ranks with faith in the absolute relation between structure and function. That mustard seed of faith which will remove mountains now facing our progress.

In reflecting over the things that have happened in the past twenty years we are brought to a consideration of some of the problems now suggested, the solution of which will give a geometric acceleration to our future progress in the application of our mechanical principle.

By our success with the "flu" we have already achieved our geometrical progress in public opinion. Previous to that time we had begun to argue seriously even among ourselves that osteopathy was only a specialty of the healing science, capable of application to chronic office cases. From our convention platforms we heard the echo of our college teachings to the effect that a broader osteopathy must include materia medica. Such is not the case today. Your program of this meeting is indicative of the change within ourselves. For you seek by your program to broaden your knowledge of the absolute relation between structure and function, with no thought of broadening osteopathic principles by the inclusion of chemical agents compounded outside the body.

From this reflection comes the conclusion that the public's respect for osteopathy rests on the osteopath's respect for his own principles; that the growth of this respect depends on the development of our own faith in our principles. If, therefore, the dynamic force of our science is to keep step with the geometric progress of the world we must bend our energies to the application of our mechanical principles.

The past points out the pathway of our future. Chronic diseases won us recognition. A single acute disease, influenza, gave us professional stamina and popular applause. We must add all acute infectious diseases; and, in keeping with the world's progress, we must begin on those functional and organic diseases involving the delicate chemical balance of the body organism. Nor is this all. There lies ahead of us for study the cause of the formation of neoplasma; changes in microscopic structure, and functions of the special senses.

In the matter of technique we have unexplored lands fruitful of progress. Adjustment with us should be made not only a thing of certainty in its accomplishment, but it should also be made a certainty in its results.

Reflection on my twenty years in practice gives me hope that these things will be done; that no science possessing the dynamic force latent in the absolute relation of structure and function can or will fail to keep step with the geometric progress of the world.

LEGAL BUILDING.

Anecdotes and Incidents in the Life of Dr. Still

MRS. BLANCHE STILL LAUGHLIN, Kirksville, Mo.

I HAVE often wished that I possessed the gift to write with which some people are blessed, but I have not that gift. I wish now more than ever in my life for the power to write as I feel.

It is more than three years since my father, Andrew Taylor Still, left us. He is gone but he has left to us a heritage, the incense of his presence. In his passing the world lost one of her greatest benefactors, but I feel sure his followers will carry his thoughts throughout the world. His great work must go on.

I have been asked to write a few recollections and anecdotes, largely concerning the personal side of his life.

Some thirteen years ago Mr. Bok the editor of the *Ladies Home Journal,* wrote my father asking for an article on osteopathy. He wrote the article and it was published and widely read by all classes of people throughout the United States. Following the publication of this article he received many letters from people who had read it. Most of them were from friends of osteopathy and the letters of course were

complimentary. One was from a medical doctor in Pennsylvania, who denounced osteopathy as a fraud The letter has been preserved and for the first time is now made public. I promised father to keep the letter and return it to the writer at the end of twenty-five years, as he stated in his letter that at the end of twenty-five years, in his opinion, osteopathy would be dead and buried so deeply that not a soul living would know there was ever such a thing.

The letter follows:

Dr. A. T. Still,
Kirksville, Missouri.

Dear Doctor: Dec. 27, 1907.

I have just read the article published in the *Ladies Home Journal,* written by you, telling us what osteopathy really is. I am ashamed to know that you ever posed as a Doctor and are now placing before the American people such a humbug as this article referred to sets forth.

It would be just as reasonable to suppose or state that God in creating man placed all the food necessary to sustain life a natural life time, within his body when he made him, as for you to make the statement that all the drugs necessary for the cures of the ills of the body are within the "drug stores of the body." Such tomfoolery. Also that there is no such disease as typhoid, typhus, etc., when the microscope and the biological laboratories have given to us the exact pathology of such diseases while you write for the great American public to read that it is twisted machinery, crooked nerves, migrated tendons, and the like, as causes of the ills of nature.

Twenty-five years from this date not a soul living at that time will know there ever was such a thing as osteopathy sprung upon the people. Osteopathy and Christian Science "will be quietly sleeping in the old church yard."

Respectfully yours,

A short time after father's death Judge M., of Hannibal, told us of the struggles father had gone through when he first went to that place to practice. What he said to one of the boys is in substance as follows:

"I was prosecuting attorney at the time your father was arrested for practicing medicine without a license. He had been making some wonderful cures and the medical men wanted him to leave town. A member of the State Board who lived there, swore out a complaint against him and it was my duty to appear against him. When the trial came up I asked Dr. Still who his attorney was. He said "I do not want any attorney but I intend to plead my own case," and when he got through "skinning" the M.D.'s, and such a skinning I have never heard of before that date nor since, the case against him was dismissed without going to the jury." This judge and his family since that date have been warm supporters of osteopathy.

Just a few weeks ago there came to Kirksville for an examination at the Laughlin Hospital a Mr. S., who also lives at Hannibal. He has been for years a passenger engineer on the Burlington Railroad and at the time of the incident, relative to Dr. Still's arrest, he was a member of the town council. As he sat in the waiting room at the hospital he observed the Old Doctor's picture. He remarked to one of the doctors at the hospital, that he never saw that picture without thinking of what a ——— fool he made out of himself, when the town council of which he was a member, passed a resolution giving Dr. Still twenty-four hours to get out of town. The Old Doctor did not go but remained and converted Mr. S. to osteopathy and from that day to this he has been an ardent supporter of the science. He stated that he recalled seeing the Old Doctor on the streets carrying a large bone and that he would stop and talk to people and even treat them in public.

The prejudice against Dr. Still and osteopathy was always very great among the medical men and their followers but he was always able to defend himself and his science, no matter what the character or the strength of the opposition was.

* * *

Father looked forward to holidays, birthday anniversaries and similar occasions with a great deal of pleasure. He always had from $100 to $150 for these occasions in change—$1.00 to $5.00, which he gave to those calling on him.

I asked him one day why he did this. He said:

"I have all I want. A good bed, plenty to eat, everything I want and I like to give;

so get me some *more* change, so if the preacher comes, I won't run out."

* * *

Some seven or eight years ago, there was an old Irishman father had known for forty years or more, who called about once a month and father would give him $5.00, then more regularly until about once a week. Finally he was there three times in one week. This time father said to me:

"Blanche, get me a twist of that strong Virginia tobacco." He handed it to him and said:

"Pat, take this tobacco, you are coming too often. I don't want to see you any more now for six months."

* * *

When father left Kansas all of his relatives and friends had turned against him. His brother James wrote Uncle Ed. of Macon to watch Drew as he was crazy. After three months Uncle Ed. wrote Uncle James, "I have watched Drew closely now for three months. I think it would be well if some more of the Still's went crazy." Father never heard from this brother for twelve or more years until he began to prosper in 1892 or 1893.

* * *

Just a few weeks before father became sick, one real cold day, he asked the nurse to have the heat turned out of the house. Of course, this could not be done, it was too cold.

She came to me, and I said, "No—Pa, it is too cold, we must have heat. I'll make your room like you want it."

He said, "well, do as you think best, but first go to my pocket and get me a dime and a dollar." This I did and gave to him and started off. He called me back, and I knew by the twinkle in his eye he had something to say. "Give Miss Chaney the dime and you keep the dollar, as you are a much better preacher than she."

* * *

Some years ago father was having a well dug. After digging about thirty-five feet, it began to cave in some. He intended digging it at least fifty feet, but when it began to cave in, he decided to wall it up. The old negro who was digging nearly bored him to death about going down farther at $2.00 per foot. (He had been getting fifty cents a foot, regular price in those days). Finally to get rid of the old negro, father said: "Go ahead, Greenwood, but before you go down in that well, I think you ought to know that every half hour a white object rises up in the well and goes back." Old Greenwood said, "Doc, I wouldn't dig another foot for $5.00.

* * *

Another quite funny thing happened, which some of the readers of this may remember. Some eighteen or twenty years ago, father was talking to a graduating class and to illustrate a point he said:

"And when I lay down and die I know that my boys and girls, will carry on my work," and with that he fell down on the rostrum.

Harry was in the audience and gave one leap for the platform. Father said in loud whisper so that those on the front seats could hear. "You fool, go back, you have spoiled my point."

* * *

Father was always a great hand to bring people home to meals—this time we only had six extras. Of course, things did look rather shy. During the meal he was unusually quiet. After dinner he gave me $10 and told me to go to town and get something to eat. He said: "I was so mortified, I couldn't look up."

It taught him a lesson. We were always notified after that at least ten minutes ahead.

* * *

The Sunday before father became ill on Tuesday, Doctor Foreman of Chicago brought Private Peat up to call. They were among his last visitors. He had on an old coat with a big hole in the sleeve. He held up his arm to Foreman and told him he still belonged to the Holiness Church.

* * *

To the field members: You no doubt will be interested in knowing what has become of the first school building built by Dr. Still in 1892. It now stands on the same lot where father built the A. S. O. in 1894.

It has been painted, roofed, plastered and a new foundation put under it. We hope to always keep it in memory of the one who built it, Andrew Taylor Still.

Treatment of Chronic Parenchymatous Nephritis

C. B. Blakeslee, D.O., Indianapolis

THE treatment of chronic parenchymatous nephritis and the prognosis of any case of nephritis largely depend on the cause of the disease and the amount of degeneration of the kidney tubules. Careful physical examination enables us to detect the spinal lesion so often present at the 11th and 12th dorsal vertebræ. A quantitative urine analysis and a microscopic examination of the urine indicate to us the severity of the nephritis.

Patients with nephritis should avoid chilling and should wear wool underwear, except in extremely hot weather. The diet should be carefully regulated thereby reducing the nitrogenous intake of the body to a minimum. Such foods as liver, sweetbreads and other meats are injurious. Cereals, milk, fruits and vegetables should be taken freely. The constipation which usually accompanies this disease can be partially relieved by a properly regulated diet.

Osteopathic treatment should be given to normalize the structures in the splanchnic area of the spine. Normal body metabolism, thus reducing the autointoxication, will relieve the kidney cells of much irritation and work.

Many cases of nephritis are due to lesions of the articulations of the 11th and 12th dorsal vertebræ. There is usually limited motion, often malposition and maybe fibrous ankylosis of these joints. These conditions require specific and vigorous treatment over a prolonged period of time. Frequent quantitative estimation of the albuminuria, with a careful microscopic examination of the urine, enables us to determine what progress the patient is making. It is not unusual after a severe treatment, where the articulations of the 11th and 12th dorsal vertebræ has been forcibly loosened and adhesions broken up, for the urine examination to show an aggravated nephritis. Rest in bed, hot fomentations over the lower dorsal and upper lumbar region of the spine, with careful passive motion to prevent the adhesions reforming, and the condition will clear up in a few days.

Extremely forcible manipulation should not be attempted until after several treatments have been given. In many instances, treatments for these cases are not strenuous enough to remove the mechanical cause. Even after much temporary improvement patients must not be lead to expect complete recovery for from six months to two years.

I have treated patients who have developed several attacks of uremia, accompanied by a marked hypopyrexia and a comatose state, and yet who later have made a complete and perfect recovery. A proctoclysis by the drop method of equal parts of normal salt and sodium bicarbonate solution, with sweat-baths and careful osteopathic treatment, is in general the treatment I use for uremia. The proctoclysis should not be continued for longer than four hours at a time, then an interval of three hours, and it can be repeated as often as is necessary.

Under favorable conditions with properly regulated hygiene and diet, together with specific osteopathic treatment, many nephritis cases, which ordinarily are considered hopeless, will recover.

Case Report No. 1.—A married man age 32 came to my office in August 1916 for examination. His occupation was purchasing agent for a large factory. His family history showed that his father had died of uremia at the age of 51. His brother, who was an

M.D., had died at the age of 33 from the same cause.

This patient had had a diagnosis of nephritis by a physician when he was 26 years of age. Urine examinations from that time until 1916 had shown a constant albuminuria. During these years this patient had been careful of his diet, eating very little meat. He had apparently enjoyed good health losing very little time from work. In June 1916 he began to lose weight, to have severe headaches and to have a constant feeling of lassitude.

Upon physical examination, I found this patient with a marked general muscular weakness, an edema of the ankles and a waxy pallor of the skin. The temperature would usually rise to 99 2/5 degrees F. each afternoon. His blood pressure was 140 M. M. of mercury. A urine examination showed 6 per cent albumin, also hyalin, granular and epithelial casts with many erythrocytes. The specific gravity was 1,022 with a daily elimination of 800 cubic centimeters of urine. The spinal examination revealed a general rigidity with very little motion between the vertebræ of the lower dorsal and upper lumbar regions. There was a marked tenderness between the 11th and 12th vertebræ, the slightest motion causing pain. This patient was put to bed on a skimmed milk diet for four days, received a daily sweat-bath, had hot packs applied to the lower dorsal area of the spine following which he received very gentle passive motion in this region. He received an enema each day and got considerable manipulation in the abdominal region, directed in such a way as to lift the intestines up out of the pelvis. At the end of the fourth day the albuminuria registered at .2 per cent. His condition was generally improved and he was allowed to get up. Four days later he resumed a part of his work but continued to take osteopathic treatment every other day. He was allowed to eat spinach, carrots, lettuce, celery, baked potato, whole wheat bread, cereals, milk, apple sauce, prunes, cooked peaches, pears, apricots and baked apples. He gradually gained in weight and his general health continued to improve until the daily quantity of urine excreted was normal and the percentage of albuminuria dropped to .05 per cent. After forcing motion in the rigid joints of the lower dorsal region the percentage of albumin would increase for a day or two and would not decrease until the inflammation was apparently out of the articulations at the 11th and 12th dorsal.

After six months treatment the albuminuria was not affected to such a marked extent by severe treatments. It was in February 1917 before it was advisable to force the normal amount of motion in the partially ankylosed joints. In November 1917 the urine became free from albumin. Even then it would return at intervals until June of 1918. In August of 1918, after repeated urine analyses, a $10,000 life insurance policy was issued to him by one of the best and oldest life insurance companies.

Case Report No. 2.—I was called March 10, 1914 to examine a married woman, age 42. She was in a comatose state, Temp. 105.3 degrees F., pulse 126 very full and regular, respiration 36, pupils slightly dilated but equal in size. There was a marked odor of urine to the breath. I found she had not urinated but once in twenty-four hours and then only three or four ounces. The comatose state was preceded by a series of convulsions. Physical examination showed a very marked rigidity of all skeletal muscles, but especially those of the erector spinæ mass. I ordered an ice bag to the head and hot fomentations to the spine for fifteen minutes. These hot applications were followed by a very careful yet thorough general relaxing osteopathic treatment to the spinal structures, with particular attention to the lower dorsal and upper lumbar areas. In another fifteen minutes she was perspiring freely. She was catheratized with no results. In three hours she was catheratized again and fourteen ounces of urine were taken. In another six hours she began to make voluntary muscular movements. By the end of twenty-four hours she was rational.

Up to this time she had been treated four times and had received as many applications of the hot compresses. She continued to improve for forty-eight hours more, only to relapse into another uremic convulsion and later into a comatose state. This patient had four relapses with as many recoveries. The last comatose period lasted for thirty hours at the end of which period she made a rapid partial recovery. During the intervals between these attacks the temperature would fall below normal, perspiration would be profuse, headache very severe, blood pressure 230 M. M. of mercury and the flow of urine would be almost normal in amount. This urine contained from .5 per cent to 2 per cent of albumin, also considerable blood, hyalin and epithelial casts. This patient was allowed only skimmed milk, distilled water and diluted orange juice for nine days. In three weeks she was enough improved to get up and around the house but still suffered with head-

aches, dizziness, weakness, general malaise and edema. Her blood pressure remained over 200 M. M. of mercury and the albuminuria averaged about .7 per cent with a slightly diminished quantity of urine for each twenty-four hours.

By May 1st this patient had showed a remarkable improvement and was very comfortable but she still kept up an albuminuria of .1 per cent for several months. About July 1st she resumed hard work such as washing, scrubbing, and general housework. I continued to treat her three times each week, carefully regulated her diet and examined her urine every week for four months.

This patient gave a history of a run-away accident at 14 years of age, in which her back was injured and after which she was confined to her bed for three weeks on account of acute pain in her back. Constipation, headache and back-ache were more or less constantly present from this time on. Just previous to her first attack of uremia she was taking six heaping tablespoons full of Epson salts each morning with little results. She was married at the age of eighteen and within four years gave birth to two healthy children. This chronic parenchymatous nephritis had dated from the time her last child was born. It is impossible to state how much trouble she had during all these years but since her urine was scanty and she had other symptoms, we are safe in saying she had some kidney disturbance.

I continued to treat this patient for two years. The albuminuria gradually decreased and since June of 1916 I have never found a trace. It is interesting to note that this patient suffered a severe attack of influenza in 1919. A daily urine analysis during the febrile stage of this disease did not show any kidney disturbance. At the present time she enjoys good health.

411 Board of Trade Building.

Automatic Correction of Posture

J. A. MacDonald, D.O., Boston, Mass.

WHEN man was young a number of striking differences separated him from the lower animals. He talked and smiled and stood erect. Scientists delight to write of the talking and smiling but they don't write much of the standing erect—probably because ability to stand erect was shared by the higher apes, the bear, the kangaroo, and the penguin for that matter. But, nevertheless, standing erect on a balanced anterior-posterior double curve was the big thing, and it was the attribute of man only.

The effect of the retarding influences of civilization upon man's erect posture has produced the osteopathic field of labor. The maintenance of the correct upright posture is the greatest single factor in making permanent the corrections made or in the making in our osteopathic practice. This maintenance of correct posture is commonly supposed to be secured by exercise in the gymnasium under instructors or in the home by direction of the physician. I believe the results from this kind of exercise are negligible.

To get at the point I wish to make I should like to dismiss some exceptions such as special exercise in scoliosis, exercise after mobilization periods in fracture, dislocation and other injuries, the five minute setting up exercise (which merely amounts to using the full range of motion in the joints about once. A healthy dog or cat instinctively finds it enough to simply account for the full range of motion in the joints after rest. Their real exercise is obtained in play or hunting and is automatic—the attention being directed to an object wholly outside of conscious movement.)

Let us say a patient is instructed to take gymnasium exercise, flexing arms, legs, back and neck, and to give his attention to properly performing the simple gymnastic movements. If he persists and gives his time and attention to the extent of actually increasing the muscle substance he will use

much time and will power. He is using volition for simple movement when simple movement should be automatic. The patient who gives his time and will power to developing muscle by calculated movements is working volition against reflexes, which reflexes should govern simple movement automatically. The fact that the gymnastic movements may become reflex does not save the situation. The object of development is not movement itself, it is to accomplish an act by movement. I have treated many gymnasium instructors, and they are a class of patients wholly discouraging to me. They present fine appearing bodies, well developed muscle and nice alignment of frame, and what else? Exaggerated reflexes, never resting muscles, terrific tension in mind and body; they say they are tired and nervous, irritable and uneasy, and they want to know why on earth they should be sick standing up when they have taken such good care of themselves. It is possible that they are the victims of functional abuse as truly, though in a less degree, as are the neurasthenic and the functionally insane, and the only relief is that which comes during the relaxed periods of exhaustion. And, by the way, the renowned vibrator discussion of a few years ago should have been ended osteopathically by the knowledge that the vibrator secured its relaxation via the fatigue route. In our school we say, let us correct the stomach mechanism and get natural gastric juice, instead of using artificial gastric juice. Then why not say, let's have natural exercise instead of artificial exercise?

How are we to come at it? Let me attempt to describe a process everybody knows is a true process and renew interest in a phenomenon which should be the breath of life to every osteopath who aims to be an expert. As was stated in the beginning, man was the only animal to stand erect by balancing on a double compensating anterior-posterior curve. This double shock absorbing curve was built up during a long biological period, and as the curve approached balance the ligamentum-nuchæ began to grow smaller, so the naturalists tell us. Man wasted no great muscular energy in standing easily, and was right then a long jump ahead of his nearest competitor. He was balanced in erect posture by slight alternating contractions and not held erect by pure muscle force. To hold these curves and secure balance was automatically developed a series of co-ordinating muscular groups. These co-ordinating muscular groups held the curves true when man stood erect. If the muscles were hurt or diseased the curves were distorted. If the bones of the curves were hurt or diseased the co-ordination of the muscles was lost, and distortion resulted.

Now, this wonderful co-ordination is a biological product of the ages. It is stronger than the product of abuse of posture. Re-establish it and overcome the defective posture. We may be sure that a function so developed can be re-established by use if there is any flexibility left in the parts. It is our business to correct the alignment and secure flexibility. The patient must use the co-ordination and so re-establish it. How shall we teach the patient to use this co-ordination? Simply have the patient exaggerate erect posture two or three times a day—one single complete effort each time. Put the co-ordinating spinal nerve tracks through their paces each day and every subsequent action in work or play will employ the recently tracked co-ordination, and automatic exercise is the result. Good osteopathic treatment and posture correction follows. The old dormant co-ordination of spinal group muscles will pull up or attempt to pull up to their old inherited lines; and this is the force which must be encouraged to come back.

There is something wrong with gymnastic exercise. Long ago the physical instructors realized that there was something wrong, and they thought it was something lacking rather than something wrong in principle. So they put in more games, folk dances, etc., and this innovation did take some of the curse off but the defect was there. Volitional control of body movement was carried too far. Spinal co-ordinating muscles are semi-voluntary. Their perfection of action depends on reflex. Reflex action guards and controls energy output automatically; volitional control does not—and any way one must do more in life than watch himself move.

A few days ago I interviewed an osteopath (a man of first class reputation and training) who is called upon to treat the

students and instructors in the greatest gymnasium school in the world. We discussed the substance of this article. He believes it explains why he could do little or nothing for those people.

I have written this paper to try to call attention to a thing which has served me well in my efforts toward permanent correction of the familiar reversed curves (posterior lumbar and flat anterior dorsal with distorted lumbo-dorsal). I had but little success before working along these lines. I do succeed now. I expect to describe in a subsequent paper the instructions to patients. The idea is not new to us but it certainly is neglected by us. My purpose is to emphasize a fundamental—not to assail the gymnasium.

160 NEWBURY STREET.

Exercise Prescriptions

L. MASON BEEMAN, D.O., New York City

(Read at the meeting of the New York Osteopathic Society, Utica, October 22, 23, 1920)

SOME years ago I had the opportunity of making about a thousand anthropometric charts, as they are called, by the system of measurements developed by Dr. Sargent, of Harvard, and of prescribing and carrying out the corrective exercises indicated. The revelation of the need and of the results of this work gave me a new appreciation of its value, and the findings in examinations of boys and girls in the intervening years, as well as of men and women who were supposed to have benefited by corrective gymnastics in college, have merely confirmed more strongly the need for this kind of work. Whether he may, or may not, have had a similar experience, every osteopathic physician who will acquaint himself with the uses and possibilities for correction of the apparatus of the average gymnasium will find that he has increased his ability in prescribing exercises.

To a group of physicians it is unnecessary to urge the value of this field for cases of curvature, faulty posture, unequally developed muscles, general loss of tone, post-traumatic and operative conditions. Given a fair knowledge on the part of the physician, and the cooperation of the patient and a member of the family, the most gratifying results can be obtained. And this can be accomplished with practically no outlay for apparatus. One of the best developments I have ever seen was made with a six-foot bath towel.

Since it is obviously impossible to cover the entire field of exercise prescription in the time allotted, I have thought best to confine it to one part of the body, namely, the lungs and their external wall. In the conditions of modern civilization, particularly in cities, one needs to be fortified against enemies that work insidiously. Isn't it true that many cases of t.b. had beginnings so small that they escaped suspicion until the case was well developed? Go into the first school room you pass after you get home, and see the cramped positions of the chest walls of many of the children. Note the bowed position of clerks and higher officials when you enter a business house. Watch the posture of the average typist you see, particularly note where the support for her back is located and how it makes her sit. Where should it be to give her back the proper support? Put one hand behind you when you go into the next social gathering of young people, and count on the fingers of the other how many you find standing on both feet. An osteopathic physician

can render the community in which he lives a genuine service along these lines.

I am going to consider this prescription from three points:

1—The expansion of the bony cage in which the lungs rest?

2—The health of the lung tissue itself; and

3—The therapeutic value of deep breathing as a defense against colds and as a help in nervous conditions.

It is self-evident that the chest walls must expand if the lungs are to develop properly. There are a hundred ways in which this can be done, depending on the condition of the patient and the result desired, but the one that I prefer in most cases involves both respiration and the use of opposing sets of muscles. The results gained by this exercise are dependent on degree with which the muscles work against each other and the correct positions of hands and arms.

POSITIONS—1. The arms must be shoulder high, neither above or below this position. 2, in drawing arms back to sternal end of clavicle the proximal joint of thumb should find the articulation of the sternum, then palms turned inward, and as soon as the thumbs feel the axillary space, the fist is turned downward so as to lead the arm, and as the exercise continues is turned backward and pushed obliquely downward and backward, finishing behind a plane drawn through the hips.

DIRECTIONS—1. Hands at side, wrists devitalized. Inhale slowly, and bring arms upward and parallel in front of body, shoulder high. 2. Vitalize wrists, palms down, and draw arms backward, elbows shoulder high, until thumbs touch the clavicle, at the same time opposing the biceps with the triceps. 3. Turn palms toward the chest and push outward as if thrusting two objects apart with the elbows. 4. When the proximal joint of the thumb feels the axillary space, turn wrists downward and backward, letting them lead the arms in the rest of the movement, and push downward and backward, as if raising yourself on a high seat with your back to it. 5. Exhale, and keep chest wall raised.

(Let patient stand before a mirror where he can see the difference in his chest position.)

The two following exercises are particularly good in cases of round shoulders with depressed chests.

1—Inhale deeply, and bring palms together in front of body, shoulder high. Sweep arms, palms *upward*, to side, shoulder high, and make circles about a foot in diameter with the extended fingers. (Make three or four, and return arms to the front, repeating until necessary to take a new breath. Circles should be made from front to back.)

2—Clasp forefingers behind back, arms extended. Inhale nearly a full breath and draw arms upward between shoulders as far as they will go easily. Take a quick inhalation to pack lungs, and at the same time thrust arms upward as far as they will go. Hold position for a few seconds, and exhale.

Lung tissue, if not properly exercised, has a tendency to adhere to itself, and from the shape of the lungs this can take place most easily at the apices. Hence the necessity of complete inhalation, for it is in the apices that a tubercular process usually starts. How many patients believed you when you told them where the apices are located? I care not how healthy otherwise the person, he cannot be too well fortified in his lung tissue. I want to illustrate what I mean by a complete breath.

1—Stand erect, heels together, head up, hands at sides. Inhale *slowly*, filling lower, middle and upper part of lungs in succession. Hold breath for a few seconds, and exhale very slowly. Repeat several times.

2—After inhaling, fix fingers extended together to be used as hammers in tapping the chest walls. Then beginning at the apices in the midline, tap chest walls vigorously, going alternately from sternum to axillary line and dropping down to the next intercostal space. Continue until necessary to exhale, and repeat.

3—Inhale as deeply as possible, pucker lips as if to whistle, and expel *forcibly* a little air at a time, pausing, then exhaling more in the same manner. Continue until absolutely necessary to inhale, bending

forward in the effort to expel as much air as possible; inhale quickly and expel all the air at once *forcibly* through the mouth. Inhale slowly, and continue to breathe normally.

This exercise can be made attractive to young people by appealing to their pride. No red blooded boy wants the other fellow to outrun him or to outblow him on the respirometer, no girl wants a neck so bony that she can't wear low neck.

Before taking up the third point I want to expose a weakness in this appeal. It exists because the average patient thinks of deep breathing as breathing harder than he does ordinarily. He isn't to blame for his belief. He needs the advice of a physician who really appreciates what deep breathing is and does. Most of us believe it in theory, but fail to impress our patients with its importance because we don't go much beyond the theory. Naturally our patients aren't wildly excited over the prospect, and don't follow instructions. You can't talk deep breathing for colds, if you don't believe in it, any more than you can practice osteopathy successfully if you don't believe in it. Now, just as an illustration, how many of you have ever broken a cold of your own by nothing but deep breathing? (Less than a third of those present raised hands.) I want to say from personal experience that it can be done. Here are two helpful exercises:

1—Close one nostril with the finger by pressing on the side of the nose, inhale through the other, close the one you inhaled through and exhale through the other. Reverse this process. (b) Continue by exhaling through both nostrils instead of one. (c) Vary it by inhaling through both nostrils and exhaling through each alternately. Repeat several times.

2—Inhale and exhale forcibly, throwing head up and down to aid action, as if a piston were forcing air through the nostrils. Pause and repeat. (This should be done carefully at first so as not to produce dizziness.)

Finally we come to the application that is most difficult for the physician to accept and to make his patient believe, namely, the therapeutic value of deep breathing for nervous cases. It is a good deal like trying to make a new patient see that osteopathy is good for anything but bones. Now, first of all, let's see how much we are already familiar with in this matter from daily experience and general knowledge. We know that those who are preparing for the priesthood in some of the religious sects of India practice a rigorous system of breathing because some of the tests they undergo demand complete control of the nervous system. We are familiar with the fact that singers and speakers require unusual breath control, though we may not grasp all the reasons for it. For example, you have seen a singer come on the stage, acknowledge the applause of the audience, and then apparently look the house over. What for? To see how many are present, or to locate some particular friend? Possibly, but if you could see what is going on in those lungs, you would discover that he is probably taking a series of deep breaths for the control of his nerves, so that the first tone shall show not the slightest trace of nervousness. The public speaker who understands this use of breath control over the solar plexus resorts to this same method to secure complete control of his nerves, while the one who doesn't gulps and reaches frantically for the water pitcher. Let's go a step in another direction. Did you ever see a child that was angry or frightened tell its mother in a calm voice and even breathe what the trouble was?

Now, there are your observations from real life, they are facts, they are founded on certain principles of breath control, or its absence. Can we utilize them for the benefit of our nervous patients? We certainly can, if we know how. There is a certain rhythm in the nerve flow required in the ordinary, semi-automatic actions of life, and a lack of it in those actions when performed by a nervous person. Why, then, not attempt to improve the rhythm for the nervous person?

One of our first observations is that the patient is holding himself in too great muscular tone, he can't relax. Our first task is to help him do the impossible. I want to say frankly that it isn't an easy thing to teach him, but it can be done. Instruct the patient to loosen any tight clothing and lie on his back on a bed, feet apart and arms extended at right angles to the body, and then RELAX. If he finds un-

usual difficulty in doing this, he may have to try it with a part of the body at a time, as for example, with the head first, then the trunk, arms, legs, feet, etc. For some who can't seem to let go at all it is a help to think or say aloud, "If this bed doesn't hold me up, I'm going to cut a hole in it the shape of my body." At any rate, the patient must secure as nearly complete relaxation as he can to get the best results from the next step, which is the taking of from 12 to 24 deep breaths slowly through the nose. In some cases the quieting effect is immediate, in others it follows only after determined effort. But it can be secured. As a second step you can try to get rhythm in breathing while walking. Let the patient inhale to the count of 4, keeping step to the count, hold the breath to the next count of 4, and then exhale to the next count. This should be continued with an increasing count for each of the divisions up to 8, 10 or 12, as the patient may be able to control breath. A further helpful variation is to have the patient rise on the toes while walking and inhaling. We mustn't get the idea that this alone will cure the nervousness of a patient. It will help, and help a lot, but it will have to be supplemented by diet, treatment, and what not, depending on the peculiarities of the case. The woman patient of this type probably has a speaking voice several tones too high in pitch, another sign of nerve tension, and will profit by advice as to the proper use of her vocal apparatus to avoid this waste of nervous energy.

Remember that these exercise prescriptions are not ends in themselves, they are merely aids in bringing the physical state of patients toward the normal. Adjustment is the keynote of our work, and should no more be clouded by adjuncts of this kind than by the use of drugs. The difference is that we know that means of this kind are natural, efficient and harmless, while we doubt the value of drugs as the best means of restoring health.

I believe so firmly in the value of lung exercise as a safeguard for health that I have anticipated your interest in the method by bringing it to your attention with some emphasis. My observation leads me to but one conclusion, namely, that the average physician of whatever school has too little appreciation of intelligently directed exercise of this kind, and too little knowledge of its use to give it its proper place in the therapeutic field. After testing the value of exercise prescriptions, particularly those intended for the lungs, for over twenty years, I can unhesitatingly recommend their use to you as valuable in most cases and indispensable in many. Besides this, they're built on the goose and gander idea. They're just as good for you as for your patient.

51 East 42nd Street.

Cause and Effect of Impaction of the Bowel and Its Specific Treatment

Curtis H. Muncie, D.O., Brooklyn, N. Y.

Fecal impactions are present in 80 per cent of all chronic cases. The majority of these sufferers drag along with their disease wrongly diagnosed, or merely symptomatically diagnosed as auto-intoxication, sluggish liver, bilious attack, constipation, etc., and never receive permanent relief until a thorough physical examination locates the impaction and its cause, followed by skilful removal of both.

Stasis of one or more sections of the colon, through a period of months or years, allows fecal matter to gradually coat the bowel walls. It becomes hardened and continues to accumulate until there is formed an impaction varying from the size of a plum to that of a large orange. Some impactions are elongated, involving the full length of the colon.

The part of impaction which is adjacent

to the bowel wall is the hardest area. Through its centre there is a hole which allows fecal matter to pass. Complete obstruction of the bowel occurs when this hole becomes clogged.

By keeping this pathology in mind it is possible to determine what progress is being made in breaking down the impaction during treatment. Thus when a patient first takes enemas, results are excellent; later there is less bulk but the stools are small, very hard pieces; still later there are hard balls shaped on one side like the wall of the bowel, with imprint of the rugose coat against which it had been lodged. In severe cases, pieces of membrane or mucus are passed, clinging to an enterolith, showing the effect of an impaction on the bowel wall, causing chronic membranous colitis. Membranous colitis and impaction of bowel usually co-exist; nor can the inflammation be permanently corrected without first removal of the impaction and its cause. Where a large accumulation exists, the bowel wall will be found dilated two or three times the normal size.

Symptoms and Effect on System

These patients usually present a line of symptoms suggesting auto-intoxication — and they all have it. They have lost their usual vigor; are easily fatigued, especially from standing; there is a tendency toward despondency; and they may have bilious attacks, headaches, coated tongue, heavy breath, pains in joints, and vague aches, and feel dopey.

Another type of patient will have pressure symptoms, but no particular toxemia. They complain of dull ache or dragging at caecum or wherever the impaction is.

There is still the third type with various reflex symptoms — back-ache, headache, shooting pains anywhere in abdomen or to distant regions. Thus, a man recently came for a diagnosis, believing himself to be suffering from ulcer of stomach. All of his symptoms proved to be reflex, even to vomiting after eating, due to a large impaction of caecum. Nature was talking to him; she was saying: "Your intestinal tract is loaded; I will not allow any more food here until you clear the tract." He did not listen to nature, so she saved his life by causing emesis, until osteopathy removed the cause.

Impaction cases often give a history of one to three bowel movements per day; others have loose movements; more claim to be constipated; and still others alternate between constipation and diarrhoea, suggesting an accompanying colitis.

The patient's subjective symptoms are not only unreliable on which to base a diagnosis, but are often contradictory. This is the answer to the question why this condition is so commonly wrongly diagnosed.

A thorough, skilful physical examination is imperative; and, without the keenly developed osteopathic tactile sense, it lacks both thoroughness and skill.

Impaction of the bowel should particularly suggest itself in patients giving history of the following conditions: So-called bilious attacks, migraine, toxic headaches, chronic appendicitis, (which is often pseudo-appendicitis); colitis, bloating of the abdomen, all auto-intoxication symptoms, floating kidney (pseudo), ovarian diseases, digestive disturbances, all cases of dementia, psychoses, and other mental derangements, acne, eczema, and other skin diseases.

It should not be inferred that all these pathologic states are due wholly to impactions, though many no doubt are. Impactions at least often act as contributing and exciting causes in these conditions, and the cure lies in their removal along with any other causes associated with the key lesion.

Cause of Impaction

In order to cure these cases permanently, me must not only apply an efficient method for removal of the impaction, but we must search and find the underlying cause that produced it, and by removing this cause prevent future accumulations from forming.

First in importance among causes are bony lesions. These are usually individual subluxations which affect the innervation to one section of the colon, rendering its peristalsis insufficient to move the fecal contents along. The 10th to 12th dorsals are in lesion in hepatic and splenic flexture impactions. Innominate lesions in caecal

and sigmoid impactions; and group lesions of lower dorsal and lumbar region in impactions involving large areas of colon.

Second in point of frequency, attributed as underlying cause of impaction, is prolapse of sigmoid, caecum or transverse colon with angulations and adhesions. Prolapse of the sigmoid flexure is practically always the cause of impactions of the caecum. The physiologic study of peristalsis shows why this occurs. Normally the bowel contents move toward the anus. The presence of a prolapse sigmoid causes a stoppage of the bowel contents at this point, which finally excites reverse peristalsis; this moves the bowel content back toward caecum. It finally reaches the caecum, and through months of this perversion of peristalsis, a caecal accumulation is formed. If this process is not retarded at this stage the entire ascending colon becomes impacted. If it continues further there will be an involvement of descending colon adjacent to the first turn of sigmoid.

A prolapsed transverse colon tends to cause impactions to form at the ascending colon adjacent to the hepatic flexture, due to sharp angle formed, and presumably held by adhesions incident to chronic colitis, or other inflammatory processes. Second in frequency will be an accumulation in transverse colon adjacent to splenic flexture due to the same cause. From the pressure of pregnancy accumulations commonly form. For this reason all post partum cases should receive careful examination of the abdomen as well as the bony structure.

Any disease of the bowel as membranous colitis should be considered sufficient cause to produce impaction; but back of the colitis is its causative lesion, which must be located and removed. Post operative adhesions, displaced uterus, and Lane's kink, are less common causes.

Removal of Impaction

Enemas plus osteopathic manipulation of the impaction is the only means that has ever proved effective. Both must be given correctly and persistently until the bowel is cleared; otherwise, only partial results will be forthcoming.

Enemas are safe, sane, non-habit-forming, do not weaken, and are easily taken by patient. On the other hand they are strengthening because they eliminate the poison from the patient's bowel. They are not habit-forming if properly taken. Some people erroneously believe they should have a normal bowel movement the day after an enema, and if they do not, they take another enema — indefinitely. The enema clears away all that is loose in the entire bowel; thus there is no contents in the rectum until the second to third day; therefore, nothing for bowel to work upon. A normal movement should not be expected until the second day.

The enema is not only an internal bath to dissolve and loosen from the bowel wall old, hard feces, but its presence in the colon excites persistalsis through the entire gastro-intestinal tract, and is thereby the most efficient method in disturbances of the stomach and small intestines. A cathartic is never needed. A. T. Still Osteopathy, diet and enemas, cover the whole field successfully. The worst cases of impaction are those which have taken cathartics all their lives.

The patient should take an enema once per day with two quarts of warm water and one tablespoonful of salt; the second enema should be water to which has been added a little castile soap; alternate every day between these two enemas. Do not use soap enemas in case of colitis; use flaxseed solution made as follows:

Boil whole flaxseed in water, slowly, until it becomes a semi-gelatinous mixture, which takes from three to four hours; pass it through cheesecloth to filter out coarse particles. Use one cup of the solution to two quarts of warm water for enema.

The patient should take enema lying on the back with feet resting on floor. Allow water to run very slowly. Do not allow a colon tube to be used; use only rectal tip. If the impaction is in caecum or ascending colon the patient should take half the water while on back; then turn on right side to allow water to gravitate to area of impaction; thus the patient should be instructed carefully as to position to assume, depend-

ent upon area of bowel involved. Enemas taken in the knee and chest position help to replace a prolapsed sigmoid or transverse colon.

Enemas should be continued until palpation determines the complete elimination of impaction. It may take from two weeks to six months of enemas to complete the work. Some impactions are like stone and it requires time to break them up and eliminate them. 100 per cent of uncomplicated cases can be cured if treated correctly.

Failure to take enemas successfully is traceable to exciting peristalsis through water too hot or too cold or too irritating; or from a prolapsed sigmoid, impaction of caecum or highly irritable and inflamed bowel. Where very hard impactions exist it is sometimes advisable to have the patient take a high oil at night before retiring followed by an enema in the morning. The patient takes the knee and chest position; a colon tube is passed into rectum six inches; a funnel is attached to end of colon tube, and four ounces of cotton seed oil is slowly poured into funnel. The patient should remain in position for ten minutes before retiring, so that the oil will gravitate to area of impaction.

Benefits of Enemas

During the process of elimination the toxic symptoms are sometimes aggravated due to the breaking down of an old accumulation of putrefying matter. The enema softens it but it cannot be all eliminated immediately; and some of it becomes dissolved in the water, and in this state is suddenly absorbed into the system, causing the temporary aggravation of toxic symptoms. Most patients, however, feel wonderful relief at once from the enemas. In acidosis cases one tablespoonful of bicarbonate of soda, one tablespoonful of salt to two quarts of water is beneficial. For a very stimulating enema use one cup of molasses and one tablespoonful of salt to two quarts of water.

Once in a while we hear the fallacy that enemas are harmful. This idea was started by the same type of individual who years ago was afraid to take more than one bath a week for fear of washing the natural oil from the skin; his greasy skin proved his argument! Any good thing can be abused and enemas are no exception to the rule. I do not believe in enemas being used constantly. They should be used to unload the colon, but the cause which allowed the bowel to become diseased, should be adjusted osteopathically. Nature will then do her work unaided by enemas or any other artificial help. Osteopathy cures the patient. Enemas are the best means to promote hasty elimination. While enemas are being taken by the patient, adjustment of the causation lesion must be accomplished plus careful manipulation of the bowel.

The purpose of abdominal treatment is twofold; first, to adjust any and all displaced viscera; and, second, to lift and free impacted areas and attempt to loosen and break up the accumulation so the enemas may more quickly eliminate it. When a bowel has held a very large impaction for months or even years, its wall will have become distended. When the impaction is first cleared away there will be a tendency for the bowel to fill up at the point of former distention. This should be carefully guarded against, and through local bowel treatment it can be prevented. In due time tone will come back by establishing normal nerve and blood supply to colon through adjustment of the causative bony lesion.

Adjust a prolapsed sigmoid transverse colon, or caecum, as follows:

Patient assumes knee-chest position, takes a very deep breath and expires air suddenly. During expiration operator pulls the displacement gently but firmly toward diaphragm by placing his hand below displacement. The posture aids adjustment through gravity. The deep inhalation exaggerates lesion and exhalation plus abdominal suction through action of diaphragm, together with traction corrects the prolapsed organ. Relaxation of rectum at time of expiration aids through ballooning of sigmoid through atmospheric pressure.

The sigmoid may require local treatment and very special attention. Referring to my former paper on Prolapsus of the Sigmoid, published in A. O. A. *Journal*, Sep*temper*, 1918, one will get a comprehensive supplement to this article in dealing with special cases.

Specific adjustment of all causative spinal lesions, along with the foregoing, is imperative for a permanent cure.

Diet regulation during elimination depends upon the chemical state of the patient as determined by a qualitative and quantitative urinalysis. Many cases suffer from acidosis, and need a diet to meet their chemical needs in this respect, etc. (See Acidosis, Webster, A. O. A. JOURNAL).

In general, it is unwise to fill up a sewer pipe when trying to clean it out. For this reason it is advantageous to cut down the solids, and use sufficient liquid and light foods to support the patient's energy, and thus help nature by not loading the bowel with heavy solids the patient does not need. I have seen cases gain weight on liquid diet when they were losing on three heavy meals per day, simply because they could assimilate the light diet, but the heavy food over-burdened the already loaded tract to the point of toxemia and mal-assimilation. Diet of vegetables, fruit, cereals, buttermilk, etc., is best, cutting down meat, fish, eggs and sweets.

Abuse of the Liver

We should not lose sight of the fact that each of these cases is suffering from sluggish, overworked liver, hepatic toxemia, because of the constant stream of toxins delivered to it by the portal vien from the impaction. It thus carries on its work cheerfully until it falls under its excessive burden of filtering out the toxins. Then the symptom-complex of auto-intoxication develops. The misunderstood liver gets the blame and then gets something worse; a dose of poison, such as calomel, to whip to quivering activity its already overworked cells.

The osteopathic physician should understand this situation and lift the burden of the liver until the cause, the impacted bowel, is corrected, at which time the liver will take care of itself. A diet should be prescribed to help lift the hepatic load by lessening its glycogenic function through cutting down carbohydrates, and its nitrotoxic killing function through decreased proteids.

Cases of bowel impaction are usually easily depressed, due to two causes: 1st. A prolapsed sigmoid or transverse colon may drag upon the pelvic smypathic and cause this symptom, together with exhaustion upon standing for a long time. 2nd. In all toxic intestinal conditions, the colon bacillus is present in great numbers, which causes toxins of a depressive nature to so affect the nervous system and live cells. The other extreme is the bacillus tuberculosis, which produces a toxin of a stimulating nature, acting upon the nervous system in such a way as to cause hope, faith and optimism to be dominant, as is so often seen in tubercular subjects.

Therefore, whenever a patient is depressed mentally out of all proportion to any environmental cause, it points to one of two areas of involvement: Either there exists toxemia of the gastroc-intestinal tract involving secondarily, the liver; or, there is pressure upon the pelvic sympathics usually from a displaced sigmoid or uterus. In either or both conditions an impaction is invariably present.

One of the worst cases of impacted bowel I have ever treated was a case of melancholia, even to the point of attempted suicide on two different occasions. She had been long since given up as hopelessly insane by several of the noted alienists in this section. Examination showed the caecum to be holding an impaction as large and hard as an orange, with the entire bowel more or less involved. The sigmoid flexure was completely prolapsed into the ampulla of the rectum, due to an innominate lesion. It took six months of daily enemas before the bowel area was clean. The last week of enemas brought the foulest material imaginable, containing grape seeds. It was learned that no grapes had been eaten by the patient for over two years, which led to the assumption that the accumulation had been present for at least that period. Data accumulated from many other cases have led me to believe that accumulations are, in truth, of years' standing. The patient cleared up mentally in direct proportion to the elimination of the toxins. Whenever the sigmoid would prolapse the depression became immediately intensified; she made an uneventful recovery, and has remained well. That was nine years ago.

Many cases have come to me believing themselves to have appendicitis. Examination discloses the fact that the pain is due

to inflammation of caecum from pressure of an impaction.

A patient recently came for relief from such a pain. He had had his appendix removed six months prior for the same reason, upon the hasty advice of two surgeons; and still his "appendicitis" continued. Six weeks' osteopathic treatment removed an impaction and its cause; and the pain in the side was gone, but so was his appendix. This was a typical case of pseudo-appendicitis. They are very common.

The presence of a severe impaction of the caecum may eventually produce a true appendicitis. The osseus lesion which allows the impaction to take place no doubt also interferes with the innervation to the appendix, and renders it susceptible to disease; it is then merely a matter of involvement through continutiy of tissue.

I have made a special study of the close association of impaction of the bowel in cases of catarrhal deafness. In fact, so closely is intestinal toxemia associated with deafness that I invariably put these cases on an eliminative treatment while the cause of the deafness is being corrected, through finger surgery.

In conclusion:

The cardinal points pertaining to fecal impactions may be summed up as follows:

1. Auto-intoxication is present in the majority of chronic diseases, and 95 per cent of auto-intoxication is due to impaction of the bowel;

2. Many reflex, and general toxic symptoms, also abdominal disturbances, are due to impactions;

3. An impacted bowel cannot be diagnosed from symptoms. A thorough examination should be given and a rational diagnosis made;

4. Prolapsed sections of the bowel and angulations are precipitating causes;

5. Dislocations of lower dorsals, lumbars, and innominates, are the underlying cause for all impactions and prolapses;

6. The cure, therefore, is dependent solely upon:

(a) The skilful adjustment of the causative lesion;

(b) The adjustment of an existing prolapsus; and

(c) Elimination of impaction.

Then, and only then, can we hope to relieve the self-poisoned, fecal impacted sufferer of his toxins and reestablish mechanical and functional harmony, which is health.

476 Clinton Ave.

The A. B. C.'s of Osteopathic Publicity

By Henry Stanhope Bunting, Chicago

Research Investor of Advertising and Author of Standard Texts on Advertising and Selling

IV.

The Anatomy or Media of Advertising

KNOWLEDGE of any subjects results from observation and description of facts. Classification is the first step toward science or making knowledge systematic and usable. Classification involves the act of distinguishing the qualities of things which must precede naming, naming being the adoption of symbols which renders knowledge definite and communicable. Counting, measuring and weighing follow. A nomenclature makes it possible to present facts and ideas with the greatest economy of language, time and effort. Precision in thinking follows. The formulation of facts into methodical order makes it possible to include all possibilities. The stock of knowledge obtained by methodical search for truth constantly grows larger by the discovery of new facts while faulty statements, contradictions and error are corrected through criticism.

Thus science results. The term "science" stands both for the stock of knowledge of the subject and for the method of searching for still wider knowledge. The purpose of science finally is the application of such knowledge to the practical affairs of life.

This brief description of the way any science starts and grows recapitulates the main steps that have been taken to reach our present knowledge of advertising. It must be obvious then, the great importance of classifying advertising media. Classification is the first step towards formulating advertising science. We begin by classifying all known media. There can be no rational advertising thinking or planning without competent working

— CHART II —

THE STRUCTURES OR MEDIA OF ADVERTISING

(EXHAUSTIVE)

I (RESULTS)	II (METHOD)	III (GENERAL CLASSIFICATION OF MEDIA)	IV (SPECIALIZED OSTEOPATHIC MEDIA)
THE GENERAL MEDIA AFFORD: Publicity for Collective Benefit Primarily	General Publicity — Impersonal or Indirect Advertising	1-Newspapers; 2-Periodicals: a-News; b-Feature Articles; c-Communications; d-Editorials (Regular functions of journalism, free of cost, which are to be greatly stimulated by propaganda); e-Commercial Advertising: 1-Paid Readers, 2-Paid Display	
THE GENERAL MEDIA AFFORD: Advertising for Individual Benefit Secondarily	"Shot-Gun Advertising" *It is Directed to the Masses*	3-Billboards; 4-Out-Door Signs; 5-In-Door Signs; 6-Street Car Signs; 7-Lecture Platform; 8-Motion Pictures	
THE SPECIALTY MEDIA AFFORD: Advertising for Individual Benefit Primarily	Specific Advertising — "Personal Appeal" or Direct Advertising	9-Trade and Technical Journals	
		10-Popular Specialized Periodicals (Magazine Field Literature)	1-Specificity: Devoted exclusively to Osteopathic Propaganda — "OSTEOPATHIC HEALTH"; 2-Generality: Covering also Dietetics, Sanitation, Public Health, Hydrotherapy, Child Welfare, Physical Exercise, etc.— THE OSTEOPATHIC MAGAZINE
		11-Popular Booklets (Pamphlet Field Literature)	3-Specificity: Williams' Booklets
		12-Popular Leaflets (Leaflet Field Literature)	4-Specificity: "HARVEST LEAFLETS"
THE SPECIALTY MEDIA AFFORD: Publicity for Collective Benefit Secondarily	"Rifle-Shot Advertising" *It is Directed to Individuals*	13-Books	5-Specificity: (a) Popular: Webster's "Something Wrong"; Booth's "History of Osteopathy." (b) Semi-Popular: Lane's "A.T. Still, Founder of Osteopathy" (c) Technical: Our College Textbooks and Research Publications; 6-Generality: Any book that introduces Osteopathy incidentally
		14-Circulars; 15-Letters; 16-Letter Enclosures; 17-Post Cards; 18-Gift Novelties; 19-Premiums	

knowledge of all advertising media, which is to say their nature, cost, possibilities, limitations, uses and abuses. The first step to such familiarity is the classification of media according to differentiations of form and specialization of function. Each medium works according to the laws of its nature, just as elementary tissues in the animal body work according to their nature. Bone cells will not take over the function of nerve cells nor will muscle cells perform the excretory work of specialized epithelium. The pathology of advertising commonly results from trying to make one medium do kinds of work which are the peculiar function of other media. Thus classification, to be properly made, requires comprehensive knowledge of all media.

Any act of classification is a piece of abstract thinking. Classification must be based upon some particular point of view, excluding for convenience and for the time being other points of view. All classifications in all subjects break down at some point. There is perhaps no classification possible in science without some exception. Even the broad line of demarcation between animal and vegetable life has never been successfully stated. One field laps over another at its borders. Classifications then, are only relatively true, typically true, true for the most part, yet that part is complete enough in advertising (as in other sciences) to afford a working basis and make possible practical mastery of the subject.

Upon the basis of classification advertising laws may be formulated which are descriptions of observed facts and may be said to "govern" media. As these laws describe the operation of the forces of advertising it is possible, with knowledge of them, to predict with considerable certainty the interplay of the various forces of advertising which may seem inscrutable enough to the amateur. The final test of any science is its ability to predict. If an instance is found now and then where one or another law of advertising does not seem to hold entirely true, it is safe to say that the reason is never far to seek, never obscure, and that some new variant has entered into the problem which has to be reckoned with and composed.

The person who assumes that advertising is a simple subject is greatly deceived. The non-technical mind in advertising which undertakes to diagnose and prescribe for such problems has the same chance of being right as the layman who contends for his popular view about disease and the right way to cure it—and not more chance.

Specificity and Generality

It is necessary here to explain what we mean by the terms specificity and generality. There are two sorts of specificity in media. There is (1) specificity as to the field of interests covered (determined by the kind of information, news, editorial features and advertising carried), and (2) specificity as to the character and field of circulation, which means homogeniety of some sort among the readers addressed, usually a homogeniety of interest in the class of subjects presented. Both kinds of specificity are of prime considerations when it comes to estimating the fitness of a medium for any given advertising work. Generality, of course, means diffuseness, the very opposite of specificity. Both terms will receive further amplification in studying the various media.

The General Media

All advertising media, as our chart shows, divide broadly into two main divisions, the "General Media" and the "Specialty Media."

The General Media include (1) newspapers; (2) periodicals, magazines, journals, etc.; (3) billboards; (4) out-door signs; (5) indoor signs; (6) street car signs; (7) the lecture platform; and (8) motion pictures. The general media will receive further consideration next month.

The Specialty Media

The Specialty Media include: (9) trade journals devoted to the various fields of industry and commerce, corresponding to the profession's technical journals such as *The A. O. A. Journal, The Osteopathic Physician, The Western Osteopath,* etc., as well as the State Association bulletins.

(10). Popular specialized periodicals, the "magazine field literature" of the profession. These field magazines are of two kinds. One shows editorial specificity, being

(Continued on page 340)

The Journal of The American Osteopathic Association

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CONSTRUCTIVE EFFORT

When Dr. Still proclaimed that the "rule of the artery" is supreme he probably had in mind a two-fold viewpoint: First, the necessity of an uninterrupted flow of pure blood, and, second, the structural method of keeping the artery freed. This was a statement not founded upon simple theorizing, but instead was based upon actual accomplishment.

Constructive effort was the essence of his life work, which meant the interpretation or explanation of facts and their actualization provided they were of definite clinical assistance. The observing, garnering and eliciting of facts preceded analysis, interpretation and evaluation. Then followed scientific theory and philosophy so deeply rooted that the test of time and experience has only further substantiated their fundamental truths.

Hazzard, "Principles of Osteopathy," writes: "Have your theories but stick to facts. Remember that you cannot always treat a case according to preconceived theories—that each case is peculiar to itself. Huxley says, 'Theories do not alter facts, and the universe remains unchanged, even though texts crumble'."

The greatest lesson that osteopathy teaches is that we have a school of the healing art distinctly different from all others, requiring a viewpoint of biology and its allied sciences characteristically its own. This demands a rearrangement of elemental factors, added facts and a fresh interpretation. From this has evolved a new social structure with not only distinctive surface contacts but with a hithertofore unknown core or clinical data.

A host of new problems, scientific, educational and legislative, have thus been created. This clear constructive viewpoint should be constantly before us. Our cue is one of construction, not destruction, though there are certain exigencies that first demand razing prior to constructive effort. But we should recall the fact that considerable of the necessary destructive work is owing to previous premature or insufficient planning.

With our present well digested positive policies and their practicalness, the manifested get-together spirit, and the scientific and public forces upholding our work, reasonable time and effort will reap a commensurate reward.

THE NUCLEUS OF OSTEOPATHIC EDUCATION

After a few months study of anatomy, physiology and chemistry Dr. Still was insistent upon the student entering the treatment rooms in order thoroughly to familiarize himself with the *feel* of both normal and abnormal tissues. To know the normal is the first essential, so that the many gradations of the abnormal may be recognized. Tactual education is a slow process, requiring many months of daily effort under a

competent instructor before the student can attain any degree of efficiency.

Dr. Still says:

Simply standing by and seeing work done by a competent operator will not qualify you to take the responsibilities of life in your hands * * *. Once in the operating-rooms, you are in a place where printed books are known no more forever. Your own native ability, with Nature's book, are all that command respect in this field of labor. Here you lay aside the long words, and use your mind in deep and silent earnestness; drink deep from the eternal fountain of reason, penetrate the forests of that law whose beauties are life and death. To know all of a bone in its entirety would close both ends of an eternity.

Every osteopathic clinician who makes a careful structural examination fully appreciates what a delicate task is before him. A labor that involves a knowledge of the conformation and configuration of the individual, an appreciation of hereditary factors, an ability to sense the environmental influences, a familiarity with functional tests, and a tactual skilfulness and a mechanical ability that readily elicits the location of the various possible osteopathic lesions.

There is only one way to teach the student practical osteopathy. And that is to place his fingers beneath yours and teach him the feel of both normal and abnormal tissues, pointing out contractions, contractures and spasms, rigid, anchored and fibrotic joints, the character and degree of interosseous malalignments, temperature changes and other manifestations of structural involvement. This must be daily repeated on several subjects, and over a period of at least several months. Lectures will not suffice, for education depends upon tactual development.

The same is just as true in technique as in diagnosis. Skill can come only through constant practice. If not, the alternative can only be imitation and "engine wiping." With his fingers beneath yours he will readily learn the various steps of technique adjustment. First of all he should be cognizant of the feel of the tissues as they are being adjusted. He must learn to tactually sense the relaxing and inhibitory processes when such are employed. He must know that the leverages engage the restraining tissues at just the right point. Without a knowledge of the feel of the vitally reacting tissues preciseness must necessarily be largely a question of guess work. Every step of a technique method registers distinct qualities. And skill depends upon correctly co-ordinating these properties.

Without some knowledge of mechanics the student will be distinctly handicapped. But again practice is the only road to skilfulness. Personal contact with the operator's hands will comparatively quickly teach the *feel* of the tissues during adjustment, the co-ordinating forces of the leverage requirements, and avoid the pitfall of routinism.

Underlying principles and theory, as well as anatomic and physiologic facts, are essential, but when it comes to the actual case native ability as applied to the individual case is demanded. The principles are the same, but the application is always something new. Herein osteopathy is always a revelation and an inspiration.

THE PROBLEM OF TECHNIQUE

In the final clinical analysis of our professional interests the problem of technique is the most commanding feature. Clinical results have placed osteopathy where it is today. Earnest continuing and developing of the technique base is imperative. Our progress and growth will be largely measured by this alone. All other problems are in a sense, subsidiary or an out-growth of the profession's ability in getting clinical results.

During the early period of osteopathic history it was the securing of definite results that commended the attention, interest and support of the public. And the same is just as true today, although general scientific and educational requirements have added new factors to the professional problems which express attainment and the promise of still further evolvement. These new factors are so often interwoven with the superstructure, in a word so complex, that there are times when it seems the individual

loses his anchorage to the base of adjustment when some subsidiary factor assumes the ascendancy to an unwonted degree. Then is the time to hark back to basic values.

Technique results must always command particular attention. This always demands a continuance of perfecting our skill through increased diagnostic ability of both our characteristic work and of newly developed other methods, of better understanding the pathologic processes, of more definitely applying the adjustment principle, and of constantly evaluating all data pertaining to the individual case.

We have iterated and reiterated so many times about the deadly habit of routinism that it would seem the subject is threadbare, but until there is seemingly a decided professional improvement we will continue to drive this point home. This is an encircling professional sin without any rhyme or reason whatsoever.

The greatest educational work of today rests with increasing technique efficiency. And this is not due to any lack of knowledge, but evidently to mental inertia. It is a curious situation, and one that simply must be remedied. Of what vital relative use are other talents if the very nucleus of osteopathic education is neglected?

Given basic educational acquirements of such a character that diagnosis is reasonably certain and the osteopathic concept is thoroughly instilled there would be very little technique hesitancy provided the physician has mechanical ability.

PAINFUL TREATMENT

There are instances when painful treatment is necessary, but far more often such treatment reflects a misapplication of force. Probably all of us at times make mistakes of judgment here, and as a consequence the reputation of osteopathy suffers. There are so many factors, individual and pathological, which enter the equation, it is not surprising that our judgment proves fallible at times, though there are instances when our efforts may be unjustly criticised.

One source of unnecessarily harsh treatment is when the practitioner does not first carefully prepare the field of adjustment by preliminary relaxing or inhibiting, i.e., a certain reduction of the spastic grip of the soft tissues. There are several methods by which this may be accomplished. One method, which is effective, time-saving and easy on the patient, is to arrange the leverages preparatory to adjustment, then preliminarily to the technique measure carefully but firmly put the lesioned tissues on a strain in direction and accordance with the first step of adjustment, and for five to ten seconds maintain this inhibitory effect, or until one senses the soft tissue relaxation, when it will be found that adjustment is comparatively easy and discomfort to the patient almost negligible. The effort should be gradual and easy in order to tactually sense the relaxing effect.

Riggs, "Theory of Osteopathy," outlines a method of relaxing that is of value:

> It is not necessary in order to produce an effect upon a muscle, particularlly if that effect be relaxation, to stimulate the endings of the sensory nerves in the skin. The greater part of our work of relaxation is accomplished on the more deeply lying muscles. Painful stimulation of the sensory nerve of the skin produces a defensive contraction of the muscle underneath, therefore, the best results are obtained with the minimum amount of pain. To this end it is necessary to place the hands gently on the integument above the muscle which you desire to relax, care being taken to use the flat portion of the fingers. Now by approximating the fingers of the two hands you will produce a fold of skin between them. Now strong pressure will produce practically no sensation of pain in the cutaneous nerves. If this pressure be accompanied by a separation of the hands the effect of relaxation will be produced on the contracted muscles felt beneath.

DR. STILL

The JOURNAL has been fortunate in presenting the interesting articles on Dr. Still by Dr. Pickler and Mrs. Laughlin. We trust that JOURNAL readers will give a portion of their time to the study of the writings of the Old Doctor. All of his books contain many practical points and suggestions.

Dr. Teall in the *Journal of Osteopathy*, December, has an interesting article on "The Many Sided Doctor Still." It is well to keep in view his versatility. Many no doubt will recall the splendid article that Dr. Bunting wrote three years ago, *The Osteopathic Physician*, January.

Mrs. Laughlin touches upon his generosity. His kindliness was one of the outstanding traits of his character. He never forgot a friend, and he was always giving to the worthy and deserving. True affection was deeply rooted in his nature; affection that welled from the very depths of his heart. There has rarely been a historical personage more misunderstood, and still through it all he retained a most wonderful elemental balance. Such an object lesson is simply invaluable.

The generosity of Dr. Still was most noteworthy. Money evidently meant nothing to him unless used as a medium for the instruction and happiness of others. His early experience with penury seemed to enhance this special desire. His humanness, the evident love of mankind, was constantly displayed through genuine earnestness in relieving the sick and unfortunate, often, very often, not only without remuneration but by furnishing abundant needed supplies. This, without the least semblance of ostentation; in fact, such would have been abhorrent to his nature. In this respect, as in some other things, he seemed to be more than human. For the incisiveness and directness, the complete understanding, exhibited toward the attributes of mankind was the personification of love through service.

We are taking the liberty of quoting the Christmas Greetings of Dr. Edith Stobo Cave, "He Who Obeys The Law," which is beautifully expressed, and, it seems to us, apropos of Dr. Still's philosophy:

He who makes his choice in harmony
With the unchanging Law of endless life
Is free. This universal Law controls
The sun, and moon, and stars; the ceaseless tides
In rhythmic ebb and flow; the eagle's flight;
And e'en the unfolding petals of the rose.
Within this same wise Law each human life
In strange kaleidoscopic scrolls evolves;
At every change fresh combinations form,
And shape the plan a-new. Our heritage,
And fate's environment are factors keen;
But ever in the judgment seat abides
That deathless Entity, the Imperial Soul,
By free will dominant within the Law.

RELEASING TENSION

Abnormal tension probably plays an important role as a causative factor in the early beginning of many disorders. There are seemingly as many sources of abnormal tension as there are environmental forces and influences that enter into the every day life of the individual, provided these various sources of bodily tone are in one way or the other abused, neglected, or a healthful proportional balance is lacking. For the maintenance of a properly balanced mental and physical tone is a fundamental health requirement.

No doubt inheritance is of importance, but there are comparatively few hereditary weaknesses or abnormal tendencies that cannot in a measurable degree be largely overcome by early training and discipline. This is recognized by educators and physicians, and for some years particular systematic attention has been given to this field of work. For example, the Montessorri method has revealed what may be accomplished by those who have a definite insight and working knowledge of psychology. Individual requirements based upon the particular complex presented contains the key of successful accomplishment. This, individualization, is just as important to the competent treating of physical ailments as of mental development. In fact, the two mental and physical complexes, cannot be divorced for they represent the two phases, in many instances of the same problem. In other words, they are but two sides of the same shield. Recognition of this fact, provided one has a working knowledge of the basic laws, would greatly enhance one's efficiency.

Applied psychology, in its many phases, is securing many satisfactory results, not only in the so-called learned professions but also in every day business life. It would be difficult to exactly estimate the

definite gain toward happiness, health and business efficiency that has been thereby attained. The one particular point that we wish to emphasize here for the moment is a basic one, the adjustment of tension. Dispersing of energy, that is abnormaly through tension, unquestionably represents a leakage that is so tremendous that it is beyond compute. And the train of suffering and downright inefficiency, both mental and physical, that follows in its wake would be truly staggering in its consequences if there were not ready means of adjustment. Nature herself, fortunately, calls a halt and automatically rectifies, to a greater or less extent, the abnormal complex.

But nevertheless there still remain many instances where the individual cannot get a "hold" of himself without specific instructions and assistance from one who is able to interpret, analyze and adjust his abnormal state. This requires that every physician should possess some knowledge at least of applied psychology and co-ordinate it with his other therapy. This is particularly true in the field of preventive treatment which pertains to the individual and to the early beginning of disorders.

The field of abnormal tension, however, is not all of mental origin. The stress and strain concomitant with the physical environment should be guarded and protected consonant with individual capacity. This may be neglected (and the sources of such tension are legion) with the result that adjustment is either temporary or unsatisfactory. Again the problem resolves itself in accordance with individual demands, requirements and capacity.

We wish to call the attention of the reader to three articles, in the JOURNAL, on exercises. We believe they are of special value to the practitioner, owing to their bearing on normal tone and abnormal tension, and deserve careful study.

Dr. Gour, January, emphasizes a fundamental feature that is too often neglected, namely, the unity of the physical mechanism. He gives specific instances just how one part may condition another part or the whole. This is so frequently overlooked, even in vertebral adjustment, that it seemingly must be driven home time and again. Of course the conditioning mechanisms are so complex, both physical and chemical, and both external and internal, that it is often exceedingly difficult to get a true perspective of the conditions. Verily, the unity and completeness of applied anatomy and physiology contain a wealth of knowledge that we have barely touched. Bearing upon this thought one should again study Dr. Goetz's article in December JOURNAL.

Dr. MacDonald's contribution is an original study of special merit, in our opinion. He has evolved a fundamental thought of the first order, and calls attention to a source of possible abuse of function, as well as means of correction. No doubt many readers have observed the prevalent abnormal tension among a good percentage of gymnasts and have racked their brains for the reason. We believe the doctor's answer is based on sound biology.

Dr. Beeman's prescriptions are the fruit of a rich experience. They bring out a phase of applied physiology that is far too often neglected. If these physiological prescriptions are put into actual practice and consistently followed up, as well as individually adapted, a very valuable armamentarium will be added to one's therapeutic measures. Then take his method of teaching the patient how to relax: It will be found of greater assistance in normalizing tone. There are very few patients that will not be distinctly benefited by having them give ten or fifteen minutes each day to definitely relaxing every muscle of the body. It will prove a practice and discipline that will materially assist them in conserving energy and securing mental poise, as well as maintaining the adjustment already secured.

Of course, it is far from being altogether the stress and strain of work that causes abnormal tension, depletes the system, dissipates energy, lowers resistance, and establishes a vicious circle, that frequently initiates the early beginning of many disorders. Worry and rampant passions are the causes of considerable havoc. Consequently discipline and a normally adjusted body with

observance of hygienic measures will go far toward health and happiness.

The reader no doubt will recall the past remarks of James on "habits" and "second wind" in his "Psychology," the fundamental features of "relaxation" by Patrick in his "Psychology of Relaxation," and the downright cussedness of "worry" by Walton in "Why Worry?" All of this supplements in no uncertain terms competent structural adjustment, and unquestionably not infrequently prevents abnormal tension that dissipates energy and brings about maladjustment and greatly impairs efficiency.

Kempf in his "Psychopathology" writes:

When the physician and surgeon come to realize the tremendous influence of the repressed hypertense or hypotense autonomic segment and its local circulatory system as an influence in recoverability from infections, diseases and surgical shock, the localization of destructive germ colonies, and derangement of metabolism, a new epoch in the progress of medicine will begin. * * *

Sherrington has shown that all the striped muscles that must maintain a certain degree of postural tension in order to overcome the influence of gravity, that is, practically all of the skeletal musculature except perhaps the abdominal, are in a state of constant postural contraction or tension. This may vary in intensity for different muscles and organs at different times, and the degree of variation seems to be rather characteristically different for each individual. Its mechanism depends upon the presence of the proprioceptor, embedded within the muscle walls, tendon sheaths and about the joints, and its afferent nerve. The proprioceptors are stimulated by the pressure of the muscles as they contract and pull against the skeletal frame; or in the hollow viscera, by the contraction in the form of a postural grip on the contents; as, the heart, blood-vessels, stomach, bladder and rectum. Since the motor cell in the cord stimulates the muscle-cell and the latter in turn stimulates the proprioceptor and its afferent impulse again stimulates the motor neurone, it is necessary to recognize that practically all motor functions are part of an efferent-afferent-efferent continuous circuit. We have external stimuli and afferent impulses with efferent responses, but also afferent-efferent-afferent internal circuits in both the skeletal and visceral functions to consider. Since the rate of the impulses maintaining postural tension varies from 40 to 90 per second (Sherrington) the converging streams must be recognized as continuous and composed of almost innumerable minor circuits and combinations of circuits.

The postural tensions of the hollow viscera, although they vary in degree, are also continuously active, and this gives rise to a continuous, complex, converging affective stream from all parts of the autonomic musculature, to which *the organism as a unity is constantly, reciprocally adjusting itself.* Most of the time this afferent affective stream from a visceral or autonomic segment is subliminally active and does not cause the organism to adjust overtly as *a unity,* that is, to become conscious of the segment's activities.

Osteopathic adjustment that releases tension or removes the blockage to impulses, in a word permits normalization, is so reasonable that the surprising part is that one would test its validity. Lane, in "A. T. Still Founder of Osteopathy," says:

Osteopathic treatment will encompass after 30 minutes what otherwise requires several hours of sleep. Thus does osteopathic treatment stimulate the body to the rapid production of atibodies against normal toxins made by the normal activities of the normal body's cells * * * * * * it is reasonable to say that the effect of osteopathic treatment on the normally tired body is regulated by the same physiological law that underlies the production of antibodies to the toxins of disease.

We believe this is true. Probably release of abnormal tension establishes normal nervous equilibrium, though, of course, this will have its effect on the related circulation and chemism as well.

The A. B. C's. of Osteopathic Publicity

(Continued from page 334)

devoted frankly and exclusively to osteopathic propaganda, of which *"Osteopathic Health"* is the best known example. The other shows editorial generality, disguising as it were favorable osteopathic discussions among articles on dietetics, public health, hydrotherapy, child welfare, physical culture, etc., of which *The Osteopathic Magazine* is the best known example.

(11). Popular specialized booklets which present osteopathy frankly and exclusively as pamphlet field literature, much after the

manner of the field magazines. The *Williams Booklets* are the best example.

(12) Popular leaflets, also showing specificity, which present osteopathy frankly and exclusively. The new *"Harvest Leaflets"* and the older series issued by the A. O. A. are examples.

(13). Books when used as advertising media may show either specificity as to contents or the reverse. Of those having high specificity of subject matter there are three classes, to wit: (a) books popular in treatment, of which we have several excellent examples in Dr. Geo. V. Webster's "Something Wrong," Dr. Percy Woodall's "Osteopathy, the Science of Healing by Adjustment" and Dr. E. R. Booth's "History of Osteopathy"; (b) semi-popular, as Professor M. A. Lane's group of papers published in book form under title "A. T. Still, Founder of Osteopathy"; and (c) technical books, such as our various college textbooks and research publications.

All but one of the remaining specialty media shown in the chart as (14) circulars, (15) letters, (16) letter enclosures, (17) post cards, (18) gift advertising novelties, and (19) premiums—the inducement-and-reward media of advertising, discovered to be such and first put upon the advertising map by the researches of the writer—may be disregarded in this discussion. In the main such media are not well adapted to the uses of professional advertising. Still, under proper circumstances and with the right adaptation, there is scarcely a medium in this group that could not be made to function serviceably for osteopathy. Circulars and letters may be used appropriately to obtain good laws, fight bad laws, fight hospital discrimination, raise institutional endowments, etc. One form of "letter enclosure" in much vogue are the "leaflets" mentioned under classification 12. Post cards have real availability yet have not been much used. Gift novelties such as calendars, blotters, Christmas cards, etc., have had but limited use. Gift souvenirs also have some limited availability. Premiums seem to be the one specialty medium entirely out-of-joint with professional advertising. Yet, as a matter of academic interest only and not to recommend their use, it is probable that some modification or adaptation of the premium might be devised which would function satisfactorily in the professional field, under exceptional circumstances.

This group of specialty media from 14 to 19 (excepting leaflets when used as letter enclosures) are listed only in order to make the classification exhaustive and show the point of departure of osteopathic advertising as it is being done, and with this brief reference will be dropped from consideration.

(To be Continued)

9 South Clinton Street.

Natural Law Controls Body Functions

(Continued from January Issue)

C. B. Atzen, D.O., Omaha

Circulatory System

IN this series of articles erroneous statements may appear relative to the pathological and degenerative changes that take place in body-cells, and the pathologists who read these articles may turn away with a feeling of protest and even perhaps of disgust, owing to the limited knowledge that the writer has of the intricate pathological changes that take place in the body-cells, under certain processes of diseases. But let me again emphasize that the object of these articles is not to impress the reader with technical details of body-cell changes.

There is but one purpose in presenting these articles, and that is to emphasize the fact that there are three Natural Laws fundamental to all of the physiological activities of the body, and that it will become very helpful to every reader of these articles, if he will attempt to analyze the disease processes that he meets with in his daily work from the basis of this "Trinity of Laws."

It will further be very helpful in establishing for the osteopathic physician a definite foundation upon which to start the analysis of his daily labors, and if done there will be established in due time a harmonious understanding which will be very helpful in the exchange of ideas.

The writer is fully aware of his shortcomings in the technical details of body-cell changes and wishes to acknowledge this, but again reiterates that the primary object of these articles is to unify the view-

point of the osteopathic profession upon the basis of Natural Law, and it is not an attempt to give an exhaustive and trustworthy analysis of pathological changes that occur in the body-cells in different diseases.

We have in former articles, presented the respiratory and digestive systems. These two systems represent the intake side of the body. Chemical and physical activities are both utilized in the labors of these two systems, but when the work of these systems is carefully analyzed we find that the physical activities are of primary importance. Physics dominates over chemistry, or in other words, the Natural Law of physics dominates over the Natural Law of chemistry in the functioning of these two systems of the body.

This present article deals with the circulatory system. It is in no way related with the intake side of the body, but acts purely and simply as the conveyer or transporter of the crude chemical supply derived from the respiratory and digestive systems to the body-cell workers.

Let us now determine what Natural Law dominates in the functions of the circulatory system.

It is composed of the heart, blood vessels, and lymphatic system, and can be likened to a hydraulic system dependent upon a centrally located pump, driving its liquid medium through numerous channels.

The heart may readily be likened to such a central pump which, by means of its muscular power, sends a definite quantity of blood into the aorta. By means of this initial heart force, re-enforced by the muscular re-bound of the aortic muscular wall, the blood mass is forced through this channel and into the numerous sub-channels of the arterial system, dividing and subdividing into more and more numerous branches. Eventually it passes into the capillaries, where the transfusion takes place into the lymphatic stream which bathes the individual body-cell with this nutrient liquid substance, containing in solution the necessary chemical ingredients to nourish and supply the body-cell with crude chemical power, all of which is derived from the respiratory and digestive systems.

From the capillaries the reverse process takes place. The small venules coalesce and combine into larger and larger venous trunks until eventually they unite into the ascending and descending vena-cava, emptying into the right auricle of the heart. And thus we have made the complete circuit from the heart to the most distant body-cell through the arterial stream, carrying with it the nutrient substances elaborated out of the crude chemical intake (food, air and drink), and the return to the heart through the venous system until the circuit is completed.

Here we have one of the most beautifully constructed hydraulic systems in the world, starting from the centrally located pump and through resilient or elastic channels out to the farthest extremity of the body mechanism, and back again through similar vessels to the central pump, all of which is a process of physics from start to finish. Nothing but physics. Chemistry has not a single place in the entire process.

Now let us see how a slight modification of any of the physical structures of the body may cause an impediment, interfering with this living liquid stream upon which every body-cell is dependent for nutrition and for the elimination of waste.

It is known to everyone that these collapsible tubes, both arteries and veins, pierce every tissue of the body; that they criss-cross in every conceivable manner in order to safeguard against faulty body physics. However, a too rigid muscle, a sclerotic organ, a slight malposition of any part, may bend or twist these collapsible tubes sufficiently so as to cause a slight physical impediment of the free flow of the blood stream from the central pump to the outlying tissues and organs. As a result of such slight physical irregularities, disturbances of nutrition in the cell may follow. Just as soon as the cell is improperly supplied with chemical substances, or the waste matter produced by the cell functions is not removed as readily as it should in accordance with the plan and pattern, the body will present a condition that predisposes to faulty body-cell activities or body-cell reaction to emergencies, and we have here the first and original cause of disease processes.

This process of analysis could be continued almost endlessly by one in possession of sufficient knowledge of the intricate

physical disturbances that may be present, when impediment to the blood stream is produced, due to abnormal physical conditions, but I trust sufficient has been said on this system to justify the claim that physics here dominates from start to finish. For you well know that if an irregularity of one of the valves of the heart occurs immediately the entire body organism suffers because of imperfect circulation.

Here we have the most impressive picture that one could imagine of the destructive effect of any physical disturbance within the body mechanism. Both the chemical and mental activities of the body will be seriously affected by such conditions, which interfere with the transportation of the blood stream to the outlying body-cell workers. For this disturbance may and does cause stagnation in certain areas of the body within the liquid medium of the blood stream, and this immediately causes defective chemical activities resulting in toxemia and other conditions.

This immediately predisposes to bacterial infections, and also to mental disturbances such as worry, fear, apprehension, etc.

Here, then, we have a picture of chemical physical and mental irregularities, all resulting from a slight impediment to the blood stream in the organism. Surely this is proof conclusive that physics dominates in this system of the body and that the osteopathic viewpoint therefore dominates in this field.

Problems of the Profession

PUBLICITY FOR THE PROFESSION

H. M. WALKER, D.O.
Ft. Worth, Texas

Secretary for the Society for the Advancement of Osteopathy

THE profession is of one accord on the subject of a definite need existing for osteopathy. That need is for a better, and a greater understanding of the principles, merits and attainments of osteopathy by the public.

However, when we get to the point of the actual remedy for that need, we come to a division of opinion. A brief analysis, then, from beginning to end which will lead us to a definite conclusion can hardly be amiss. It will be necessary to touch very briefly the points taken up, but fuller details will be furnished any member of the profession who will address the author of this article for additional information.

We all admit, and many of us proclaim, that unless the public learns more of osteopathy, and in shorter order than it has been learned of in the past, our school can not be preserved, let alone developed to the point of dominant professionalism nationally.

In a few words then, the situation is this: Public Opinion must be more rapidly directed in our favor. Public Opinion must be moulded in a knowledge of our system of therapy and disease prevention.

There can be no argument about this. It is simple that until Public Opinion decrees osteopathy, the scientific school we claim, we can not advance to any appreciable degree.

This makes our problem easy to state Briefly, we must more aggressively mould Public Opinion in our favor, by instructing the people on osteopathy.

There are two ways such a thing may be done; one is by the spoken, and one by the written word. Talk though we may, and profit by that talk though we will, we obviously can not by word of mouth attain to the position we aspire or now deserve.

That leaves us to use the written word. And the written word may be divided into three classifications, these: (1) Editorial Publicity, in the form of magazine articles; (2) Direct Advertising, which embraces literature and pamphlets mailed or handed out; (3), Paid Publicity in Publications.

Let us frankly and without prejudice consider these in their order named, and

then altogether, determine their relation to each other.

Does magazine publicity in the form of articles afford us opportunity to mould public opinion? The population of our country is measured not in thousands but in millions. Say we occasionally get one article in a magazine such as *Physical Culture* with a few thousand circulation, what does that one article amount to in a year's time, when articles by, concerning, and advertising our opponents appear in the same pages continuously?

And how often have you seen articles appearing in *highest class magazines* concerning osteopathy? Or in newspapers? Have you seen such articles as often as you have heard or seen things against osteopathy, or in favor of our opponents? Have we not a department of our National Association bending every effort to secure free publicity for us What have you read boosting osteopathy in publications in the past three months?

The fact that we are pitifully and noticeably absent from publication columns is not to the discredit of our publicity men, who have labored unceasingly in our behalf. It is to the discredit of the editors they approach.

You know of the exceedingly high advertising rates of some publications. Why are they high? They are high because the public at large appreciates and reads their editorial pages. That means it is a good and valuable medium for the advertiser.

If an editor ceased his vigilance and dropped the bars for free publicity his circulation would soon drop. It is profitable for advertisers to pay high space rates because they know that intelligent editors will not admit into their columns, the articles which publicity agents by the hundred are clamoring for them constantly to publish free of charge.

The editor who accepts material on osteopathy will as readily fall for the smooth tongue of an imitator's press agent. Then our advantage would be lost in the shameless untruths which would be printed free of charge, like our publicity.

We may as well face the truth. ***There is no way to get something worth while for nothing.*** If our system has merit, it will be profitable to us to have the public well acquainted with it. Editors and others are busy advancing *their own interests.* If an enlightened public will benefit us, those same editors will and do expect us to advance *our own interests,* and to do it by paying openly and above board, for what we get.

If we wish to be leaders, we must appear as leaders. We can not expect to come to the back door of an editor in the role of beggars, and then pose in front of his building as dignified professional men who are masters of the most logical and effective therapy in the world.

There can be no two ways about it. What free publicity we may be flung from time to time, we appreciate, and the bit of good it does us has its cumulative power. But we can not expect to establish osteopathy in an exalted position as a revered profession, with articles which editors give us to silence our begging.

If we are lowly in our efforts to seek our proper elevation, that proper elevation will also be lowly. It is plain that free magazine and newspaper publicity will not accomplish our needs nor our aims.

Let us now consider pamphlets and literature. Since Father A. T. Still was alive we have been using such advertising. Millions of pamphlets have been handed out. Each year the number has increased. Yet have we held our place in the sun? Have our attainments and our accomplishments been clearly seen by the public and kept in their view? Has Public Opinion been versed in our system and its sane, reasonable solid basis? Or has our small voice been lost in the raucous boisterous uproar of our opponents?

Let us see why we have not accomplished more with these millions of pamphlets and leaflets. Remember this: 2,500 osteopaths would have to hand out fifty pamphlets every week, for almost a year, and every week to fifty new people, never repeating any of them, to finally reach 6,000,000 people. This is significant, 2,500 osteopaths, fifty pamphlets to fifty different people, every week a new fifty, for almost a year. Remember it.

And it would cost the osteopaths $240,000 to do it, at the rate of $4.00 per 100, not including postage. Do you see why the public hasn't even been dented? Why

the impression made on the public by osteopathy is disappointing to us?

Now, let us consider paid publication publicity. First, let us stress this point. When we say publications, we mean not magazines with circulations of a few thousand. We mean the most honored, most responsible publications in the country. And we have an important thing to say in this connection later.

The Saturday Evening Post has over 2,000,000 circulation. It is conservatively estimated that every issue of the *Post* goes into the hands of 6,000,000 people. It means then that an educational message on osteopathy would reach the hands of 6,000,000 people, were we to be allowed to use space in this Curtis publication.

Do you recall the figures mentioned above? 2,500 osteopaths, fifty different people every week for almost a year, and the $240,000? One ad in the *Post* would accomplish the same result in one week and cost less than 2 percent of this great amount.

Is it not logical and reasonable that we should turn to publication advertising?

Every quack can hand out literature. Every cheap promoter can hand out pamphlets. The company we keep in direct advertising is not flattering.

The quack can't use the *Saturday Evening Post*. The cheap promoter can not use the *Post*. WE CAN. Permission has been gained from the Curtis people to use the columns of the *Saturday Evening Post* and the *Ladies Home Journal* when we carry this plan through.

They have read sample copy submitted by an advertising man who knows osteopathy. It is the first time that any system of therapy has ever gained the permission of this greatest and most conservative publishing company in the country to use its advertising columns.

This is a victory for us which we should appreciate. We have awakened the publishers to the possibilities which are ours. We have a sensible, honorable, enlightening story of the most modern and scientific school to tell, and we have the opportunity to use the greatest and best magazines in the country to tell it in. Is not this a fitting combination? Shall we rest longer on our oars, while some one more aggressive steals the opportunity which is ours?

Now, let us see the relation of these three forms of written or printed publicity.

Editors are paid to gauge Public want, and Public interest. As soon as we engage the Public's interest with a series of educational messages on osteopathy in a publication of general circulation, it will be sensed by editors.

As soon as we whet the appetite of the people with information on osteopathy, they will want to know more. Has not this been true of people you have met? Multiply their interest by 6,000,000, and present a story to them not once but thirteen times in a year and estimate the result.

When we create a greater public interest in osteopathy, editors will be glad to print articles by osteopaths. When the Public learns that osteopathy has a message of constructive interest to them, it will want more, and the editors will supply them.

We have thus far as a profession endeavored to hitch the cart before the horse. We have been wanting editors to create interest for us by forcing articles on the public. Properly, we must create the interest with the public and the public will get articles on osteopathy in ever increasing numbers from the editors.

This is not theory. It is unadorned logic which has been proved repeatedly.

Now, let us consider direct by mail or hand-out advertising. Direct advertising is always most effective when it may be directed to known prospects for your services or products. It is wasteful and inefficient when it must carelessly be handed or mailed out. It is our object to get inquiries from interested readers with our national publicity. Those who enquire are the ideal prospects for direct by mail or hand-out advertising. They will represent a select group interested in our system.

Perhaps every piece of matter that has been handed out in the past twenty-five years has done us good. We all hope so. But again let us face the truth and admit that direct advertising will do us more good after we learn that those to whom we direct it are interested. If we hand literature to people who are not interested in our system it avails us nothing. If national publicity seeks to interest millions in osteopathy, then we naturally can use more direct advertising and to better advantage.

Magazine articles, direct by mail and handed out matter, and paid publication publicity, all have their places. Let us not confuse them, nor their relative importance. Twice as much money is spent every year in publication advertising, as that spent for direct advertising. Is it possible that the learned men of the advertising world are wrong and that the few osteopaths who urge us only to hand out literature are right?

Is it not time that we profited by the successes of others? Let us don the mask of logic and reason, and doff our cloak of narrowness. We can reach the public through a series of half page messages in the *Saturday Evening Post*, and we can do it for $50,000. We can reach 6,000,000 people in this country not once, but thirteen times at least in a year with educational messages on osteopathy for this sum. Figure what this would be worth to you.

Truly, as things now stand, the battle is unequal. One system with the advantage it has gained through centuries of contact with the public, another with the advantage it has gained by shamelessly exploiting stolen ideas in brazen fashion, puts us in the position where we appear silent and submissive penitents, too proud to fight, too poor to announce our truths, and too lacking in confidence to refute arguments incessantly used against us.

These things are not true. We are too proud not to fight, we are not too poor to tell the public, nor are we minus the required confidence in our system. Plainly, simply, truthfully, we have been wrongly educated as to the proper way in which to present our system, and develop its understanding with the public. As a consequence, we have lacked the stamina and initiative which a correct knowledge of the course we should pursue would have given us.

Our ads appearing in the Curtis Publications would net us not alone results to be measured in dollars and cents but a prestige that would be invaluable. Ours would be the first profession with a system so clear, so sane, so sensible that it could be paraded before the public in the best magazines in the United States, unafraid of opposition or criticism, firm and staunch in our knowledge of the correctness of our principles. Let us delay no longer.

First National Bank Building.

STUDENT RECRUITING CAMPAIGN

H. C. Wallace, D.O.
Blackwell, Okla.

THE time is here when active work should be pushed to bring about large enrollments in our colleges next September. This department desires to emphasize especially three lines of active endeavor:

1. Nearly all schools and colleges are preparing copy for the publication of their annuals in the very near future. We think there is no better way to call the attention of students and those enlisted in school work to our profession than through the school Annuals and other school publications. Wherever possible we would like to see every such publication carry a good space calling the attention of the student body to the opportunity and advantages offered by osteopathy as a profession for High School and College graduates. This space should be paid for by local practitioners or the local osteopathic society bearing each of their names and offering their assistance to any who may be interested in osteopathy as a profession. Such advertising is especially valuable to the local practitioner in that it presents his profession in a dignified way among educated people and without having with it the idea of a selfish motive. At the same time the dealing with the student committee and school authorities brings opportunity for acquaintance and explanations of the science and usually catalogues and other literature can be placed in the school libraries. We urge upon all the necessity of attending to the matter of procuring space in these publications at once.

2. The activity outlined above is very closely related to that of procuring lists of students in the junior and senior classes of the high schools and all students in the colleges. Some of our schools prefer college lists to those of the high school and we hope those living in college towns will not fail to procure these lists. The A. O. A. will furnish literature to these lists wherever they are accompanied by the remittance of three cents per name to help pay the cost. This literature is much more expensive than heretofore and it is essential that at least this much of the expenses

be borne by the local practitioners or local or state societies. The literature is of the highest class from the publicity standpoint and designed especially to interest students in the profession and does not display any selfish motive of the practitioner, as does some publicity literature. In preparing these lists we ask that two classes of names be designated. (a) Those with whom you have conferred and who are interested as prospective students. (b) Those who are members of families favorable to osteopathy. If you indicate these two classes on your lists it will be of very material aid to our colleges in directing their campaign. We urge that these lists be procured as early as possible as the schools should start their campaign for the September classes as early as possible.

3. Above all else this department desires to emphasize the necessity of *personal interest* in enrolling students. The other two activities are very important to create sentiment and favorable thinking regarding the profession, but probably less than one-half of one percent of the students are enlisted through this means alone, as practically every student finally is enrolled through the influence of some osteopathic physician. Without the personal work, therefore, our other efforts are largely in vain.

The literature will do much in sowing the seed but it is in the hands of the practitioner of osteopathy to cultivate and harvest the crop of students. Some have been in practice a score of years without ever influencing a single student to enter the profession while others have been the means of enrolling several students every year of their practice. Both may be successful practitioners but one sits down contentedly in his own little circle of practice never giving a thought to the needs of his profession while the other is alive to the future necessities and never misses the opportunity to add a new worthy recruit to his profession. I have known of one practitioner who had the idea that the profession was over crowded and frankly stated that he did not send students for fear he might have competitors in his town. This is the most unreasonable position one could assume. In every instance within my knowledge in towns having several practitioners all of them are doing much better than they did before, other practitioners located there and the general standing of osteopathy in the whole community is very much higher than formerly.

Each student enrolled in an osteopathic college has enlisted with the local practitioner his relatives and friends who usually become staunch believers in osteopathy and supporters of the local physician. The same thing is true of enrolling student nurses in our osteopathic training schools. Such students are a continual source of inspiration and education to their relatives and friends at home. Such work, therefore, is profitable to the local physician from a purely selfish standpoint, but his duties and obligations to his profession are a very much greater reason for directing his activities in the work of the Student Recruiting Campaign.

Many of our profession do not hesitate to give liberally of their time and means in the support of many public enterprises in their locality. Such work, of course, is laudable but how much more necessary and vital to the osteopathic physician should be the welfare of his profession which has been the means of making him what he is. Too many of us are timid in assuming the position we rightfully occupy and in appealing to students on a basis of the real worth of the profession. We have no reason to apologize for our existence nor feel ashamed of the part our science has played in modern civilization.

Will not each one, then, act as if he believed in his profession and its future and show his appreciation and earnestness by giving just a few hours of time to the work of this very necessary and essential campaign of Student Recruiting?

Representatives have been appointed in each state who will have charge of this campaign and I wish to urge that each individual physician make all possible effort in all three of these lines of activity and co-operate in every way which may be presented by the Representative in your state.

SOUTHWESTERN SANITARIUM.

Departments

STATE BOARDS

LESLIE S. KEYES, Minneapolis, *Chairman*

March Examination Bulletin

Massachusetts: Second Tuesday, Wednesday and Thursday at State House, Boston. Walter P. Bowers, M.D., Boston.

Minnesota: Second Tuesday and Wednesday at Old State Capitol Bldg., St. Paul. Leslie S. Keyes, Secretary, 415 Met. Bank Bldg., Minneapolis.

Montana: First Tuesday. Asa Willard, Secretary, Missoula.

New Hampshire: Second Tuesday and Friday at Concord. Chas. Duncan, M.D., Secretary, Concord.

WASHINGTON EXAMINATIONS

The following passed our Board of Osteopathic Examiners and received certificates to practice Osteopathy and Surgery: Dr. Anne Brekke, Crookston, Minnesota; Emma Wing-Thompson, Schenectady, N. Y.; P. A. Anderson, Lewiston, Idaho; Robt. J. Lockwood, Amity, Oregon; L. D. Brown, Aberdeen, Washington; Louis Q. Dyer, Sunnyside, Washington. They have not yet located except those whose addresses are Washington.

W. T. THOMAS, D.O., Secy.-Treas.

Some apprehension is being felt as to the permanancy of the Independent Boards in several of our states with the convening of the several legislatures.

Dr. W. T. Thomas, Secretary of the Washington Board, writes that they "are expecting a little scrap at Olympia this Session."

Dr. F. M. Godfrey, Secretary of the Kansas Board writes us: There will be an effort made by the M.D.'s to do away with all boards except the board of health and let them pass on the qualifications of the osteopaths, barbers, dentists, etc. We are going to put up a good fight and we do not think they will make it.

The trend of the times is toward concentration of all government activities and especially so in matters pertaining to public welfare and health. This is an issue that must be met and if such concentration is desirable and in line with modern administration, we cannot hope to win against it, but must meet the issue in a way that will not deny us our just rights in the exercise of our profession.

Nebraska has undergone such a change and seems to be satisfied with the present methods. The Secretary of the Department of Public Welfare is a layman, and has evidently brought credit and honor to his office through his fairness in the administering of its affairs.

Some of the applicants for the osteopathic examinations have been found not to conform to the standard which has been set up, so that he has ruled applicants for examinations should file a copy of their high school credits with his department. This has brought forth the following comment from the President of the College of Osteopathic Physicians and Surgeons of Los Angeles and Secretary of the Associated Colleges:

While I am very sorry that conditions exist which make it necessary for State Officials to take such action, I really am pleased to see the action being taken. As a profession it has certainly been inconsistent, and at times has even appeared to be insincere, in our administration of our educational affairs. I trust that such official action as that taken by Mr. Antles will materially assist us as a profession in enforcing the proper kind of education for our coming practitioners.

It seems to me that the Board of Trustees of the American Osteopathic Association is very largely to blame in this matter. If the A. O. A presumes to regulate osteopathic education it certainly should provide some machinery for seeing to it that when it grants its stamp of approval to an institution that that institution is really conforming to the standard which the Association has promulgated.

No doubt some of these applicants had an equivalent to a high school diploma or were graduated before the present preliminary educational standards were as strict. In such cases a ruling of that kind would exclude them from the State. We are not willing to admit that a practitioner with years of experience and successful practice should be so discriminated against if otherwise qualified. We will believe the colleges at the present time are up to the standards until evidence is produced to the contrary.

LABORATORY TECHNIQUE

S. V. ROBUCK, D.O., *Chairman*, Chicago

In diabetes mellitus, it is of equal importance to note the influence of protein and fat intake. Sometimes the complications present, not so much an increase in glucose elimination, as an increase of acetone and diacetic acid.

Ingestion of protein and carbohydrate results in increased glucose formation though it

is likely to occur that in case of excess protein intake the increase of glucose may not be perceived to any large degree should the observation be limited to urine samples. There may be an increase in blood sugar and yet the urine content not changed in proportion.

This, along with other features of the study of the subject, suggests the possibilities of interesting and original research with this class of cases in an institution where they could be treated osteopathically. Considerable animal experiments have been made, but more pertinent information will be obtained through the use of clinics in an institution where accurate observations may be made on food intake.

Allen has worked out a system for handling cases for the purpose of determining the tolerance of the individual for carbohydrates, proteins, and fats. In order to follow his work it is necessary to have the patient under close observation. Allen states that hospital treatment is essential. At least, it should be carried out under such an environment as would assure the physician of his absolute control of the quantities of food substances consumed. No doubt this could be done outside of an institution if the doctor was equipped with a nurse who thoroughly understood the importance of making close observation and keeping an absolute tab on the patient. Thus prepared according to Allen,

For twenty-four hours after admission the patient should be kept on his customary diet in order to determine the severity of the disease. The patient is then starved being allowed no food whatever except coffee, tea, or clear broths. The patient need not remain in bed during the fast and water may be given freely. It is not necessary to give alkalies unless acidosis is present. After the urine has been sugar free for twenty-four to forty-eight hours, a hundred and fifty grams of vegetables containing five percent of carbohydrates are added to the diet. These vegetables should be boiled in three changes of water in order to reduce the carbohydrate content. Five grams of carbohydrates are added every other day passing successively through the five, ten, and fifteen percent vegetables until glycosuria appears.

As to increasing the protein, Joslin gives the following rules:

When urine has been sugar-free for two days, add twenty grams protein (three eggs) and thereafter fifteen grams protein daily in the form of lean meat, fish, and eggs until the patient is receiving one gram protein per kilogram body weight (unless the protein tolerance is below this figure), but then add twenty-five grams fat daily until the patient ceases to lose weight or receives not over forty calories per kilogram body weight.

If the patient is one in whom acidosis has been an essential factor or if the patient is obese the fat should be increased slowly, five or ten grams a day is all that can be added without producing an acidosis. (Fat is the chief cause of acidosis). Fat at one time may save the life of a diabetic but at another period it may destroy it. There is no more potent agency in the prevention of acidosis than the withdrawal of fat from the diet.

Where there is a return of sugar the original fast may be repeated. "But usually not over four days. The contra-indications to the fast are nausea, vomiting, and great prostration." In the presence of these symptoms feeding may be resumed for a few days and then the fast again undertaken. Gradually the foods that are instrumental in causing glycemia, glycosuria, acidosis, are increased in proportion and directly with the individual's ability to handle them. It is also an excellent idea to introduce a habit of one day of fast each week. Excessive use of alkalies to neutralize the acidosis is contra-indicated since it may cause an increase instead.

Your indulgence is solicited for quoting so much but I believe it would be extremely difficult to clearly state the important facts outlining Allen's treatment for developing a tolerance in a more brief form. Should the reader wish to enlarge upon this I would call his attention to Friedenwald and Ruhrah "Diet and Health and Disease," Fifth Edition. Also "Blood and Urine Chemistry" by Gradwohl and Blaivas in the Second Edition.

The following is an excellent quantitative test and has some advantages over Fehling's.

Place the urine in a graduated burette, pipette 25cc of the *volumetric solution** into a Jena flask of about 150cc capacity, and add 5 to 10 grams of sodium carbonate and a bit of powdered pumice.

Heat the mixture to boiling on a piece of a wire gauze with an asbestos mat and run the urine in rapidly from the burette until a chalky white precipitate begins to form. Then the urine is run more slowly with continuous boiling until the last trace of the blue color disappears, indicating the end point. Chloroform, if present, should be removed by boiling as it interferes with the reaction. Benedict has found that 25cc of the above copper solution were reduced by exactly 50 mgms. of glucose or 52 mgms. of levulose. If a large amount of glucose is present the urine should be accurately diluted

*Benedict's *volumetric solution* also keeps permanently and is composed of 18.0 grams of copper sulphate, 100 grams of anhydrous or double the quantity of crystallized sodium carbonate, 200 grams of sodium or potassium citrate, 125 grams of potassium sulpho-cyanate, and 5cc. of a 5 percent solution of potassium ferrocynide, made up to one liter with distilled water. In preparation the ingredients are dissolved in the same manner as the qualitative reagent, i. e. the copper should be dissolved separately.

and the test carried out in the same way, the final results being multiplied by the dilution.

Example. The twenty-four hour specimen of urine contained 2000cc.

The amount of urine required to reduce 25cc of Benedict's volumetric solution (50 mgms. glucose) was 10cc. Therefore 10cc of urine contains 50 mgms. of glucose. 1cc contains 10 divided into 50 mgms. or 5 mgms. 2000cc. contains 10,000 mgms. or 10 grams of glucose.

If the above urine were diluted one-half before examination, the result should be multiplied by 2, or 20 grams of glucose.

25 East Washington Street.

HYDROTHERAPY

Morris Lychenheim, D.O., Chicago

The Daily Bath

In answer to the question, "Why use the daily bath?" a member of the Freshman class answered as follows:

This question is of vast importance to humanity. The daily bath ought to become a part of one's life, as it is the main factor in keeping away disease by prevention method—and so simple a one.

This again takes us back to the power of water on skin: (1) circulation is kept up—stimulated; (2) body is kept clean; (3) sebaceous glands function better; (4) nervous system as a whole derives benefit and becomes stronger.

I can speak from personal experience regarding this matter. For it is to the use of water treatment that I, today, owe my life and health. After a severe case of typhoid fever. I lost all my strength; could not even walk for months. Physicians gave me up. My nurse started cold daily baths and fresh air treatment. And it was remarkable how quickly I responded to this—when drugs failed.

Daily hot bath weakens, but the cold bath builds up.

When a person is "face to face" with the problems of life, theories vanish. The daily bath forestalls attacks of illness. We have in the daily bath, a form of exercise that is both pleasant and strengthening.

When we are in the habit of taking the daily bath, perhaps nothing is missed more than when of necessity, the bath is omitted. This illustrates most vividly the "power of habit." We are "bundles of habit." We can cultivate habits which are of tremendous importance. The West Point graduate, drilled for years in iron discipline, will automatically do what to others is hardship.

The daily bath may appeal to an individual for æsthetic reasons, but, for therapeutic purposes, nothing is perhaps more valuable. A few reasons will be given. According to the age and strength, the bath can be graduated both in temperature and force. The shower bath is the best for self help; the horizontal douche for bath with the help of an assistant; but the daily tub bath is the most common and can be made about as effective as the shower with the bath spray attachment. In bathing establishments and sanitariums, the force of the water is increased by mechanical devices so a pressure of from thirty to forty pounds can be supplied to the skin. This adds the mechanical excitation which makes the skin as red as a berry.

Kellog*, in speaking of the Horizontal Jet Douche, says: "The cold douche is perhaps the most powerful of all known tonics. The alternating douche and the Scotch douche are excitant measures of most extraordinary power. The warm or neutral douche is decidedly sedative or calmative in its effects."

The daily bath ought to be used by people of all ages and all seasons of the year, because of the peculiar affinity of the body for water, both internally and externally. The neutral bath, at a temperature of 92 degrees F. to 97 degrees F., has no excitant effect, but it has a calmative effect if prolonged. But either above or below these temperatures, the body is aroused to activity.

Hot baths, though often used as a preparation for cold applications, must be skilfully handled, especially with individuals who are weakened in body. A person may faint from the atonic reaction. Always put a cold towel in turban form around the head, when giving hot baths to neutralize unfavorable reactions. In Japan, the natives take daily baths as high as 130 degrees F. without damage apparently, but the people of the Occident rarely tolerate so high a temperature.

The daily cold plunge can be indulged by those with good heart action. A safe method for average procedure is the neutral temperature with cold spray finish, where one has no shower.

In disease, with few exceptions, the sponge or full bath is indicated. Powerful reactions are secured by rubbing the spine with ice in a piece of gauze or bag following the hot sponging. Osteopaths have powerful assistance in line with their own practice in using hydropathic adjuncts. We can play upon the body mechanism as we would on an instrument to secure the action or reaction we want, provided the nervous merchanism is intact. In chronic cases, where we have degeneration, we cannot galvanize dead tissue into life, but we can palliate, and herein the daily bath, according to indications, is valuable.

39 S. State St.

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*Kellogg's Rational Hydrotherapy—page 432.

X-RADIANCE

EARL R. HOSKINS, B.S., D.O., *Chairman*
Chicago, Ill.

The following article is by Lawrence E. Day, D.O., Detroit.

During ten years of practice, I have often been astonished to find that osteopathic treatment, mainly corrective manipulations in the mid-dorsal region, would have a wonderfully beneficial effect upon the tonic action of the stomach and intestines in cases of gastric and intestinal stasis. But, as time went on, I was chagrined to find that the percentage of cures in my intestinal work was not what I had been led to expect from the results obtained in my first few cases. However, since examining a number of cases fluoroscopically, the reason for the increasing number of failures has been made apparent to me.

It is my belief that even the most skilful of osteopaths cannot in every case distinguish by palpation the difference between pyloric irritation and similar disturbances in the transverse colon, the parts being often in such close approximation that it would be nearly impossible to distinguish one from the other, except in the most favorable and unusual case. Except in extreme cases of gas distention, percussion is of little or no value in outlining the stomach or intestines, due to the fact of the juxtaposition of the organs and the varying thicknesses of the abdominal wall of the patients examined. In more than one case I have tested this out, having an experienced operator determine to his satisfaction by means of percussion and abdominal manipulation with the patient in the upright position, that the lower border of the stomach was at the level of the umbilicus only to have the fluoroscopic examination reveal the lower border six or seven inches below the umbilicus. These errors cast no reflection upon the one making the former diagnosis, the tympanitie note elicited at the level of the umbilicus by percussion being the magenblase or gas cap formed in the upper part of the stomach.

To the practitioner who has not access to an X-ray laboratory these aforementioned methods of determining size, position and pathology of the intestinal tract, a cursory and problematical examination must suffice, but, where the physician can avail himself of the opportunity, a fluoroscopic examination will settle beyond a doubt these intra-abdominal conditions.

Neither can you positively determine the focus of irritation by the subjective symptoms or the external area of pain or tenderness. Do not jump to the conclusion that your patient must have appendicitis because he complains of a more or less constant pain about three inches from the anterior superior spine of the crest of the ilium on a line extending toward the umbilicus, the region that we used to believe was occupied by the elusive appendix. Many authorities have stated, and my personal observations bear them out, that the most constant seat of referred pain due to pyloric ulceration is in the right iliac fossa exactly in the region where we would expect the appendix to be, and the true case of appendicitis may reflexly manifest its pain symptoms in the region of the hepatic flexure of the large intestine or in fact at almost any other place in the abdomen.

These reflexes, I find, obtain less often when the patient is in the upright position, and areas of tenderness can be more accurately outlined and a better idea of the true area of involvement with the patient supine. Thus in fluoroscopic examinations where the patient is being examined in the upright position, their sense of location of the most tender area in cases of pyloric irritation is rather vague and generalized, whereas in the horizontal position, if you ask the patient to put his finger on the point of extreme tenderness, during the fluoroscopic examination, he will, in cases of pyloric ulcer, place his finger unerringly on the exact spot over the pylorus where your Roentgen findings lead you to believe there is an existent pyloric irritation.

I have seen a number of cases of gastroptosis where the existing symptoms, such as constant pains in the sub-occipital region and marked symptoms in the ileo-sacral region have entirely cleared up after the ptosis had been taken care of. It comes to my mind at this time to call the attention of the general practitioner to the fact that in some of his obstinate third cervical lesion cases as well as some of the cases which we have all had where there is a constant tenderness throughout the ileo-sacral region, that it may be a wise procedure to look into the gastro-intestinal condition of these patients, keeping in mind the reflexes through the hypo-gastric plexus as well as the connection between the cervical fascia and the abdominal contents.

It is not my intention to impress upon the profession the fact that the X-ray is an infallible method of diagnosis in all abdominal and thoracic abnormalities when taken as a single unit. But, correlating the facts brought out by physical examination, laboratory diagnosis, and X-ray findings, the practitioner, having made use of all of the aids at his disposal, has obtained for himself a comprehensive survey of internal abnormalities beyond his reach through ordinary methods of examination.

In my next article I shall give some data on the various abdominal reflexes and reasons for the delay, or too rapid emptying of the stomach. And later I should like to explain to the general practitioner certain things to observe, and certain mistakes to avoid against in diagnosing plates, an important branch of your work of which you should have at least a general working knowledge.

Do not neglect this important branch of diagnosis, for in osteopathy you have at your command the greatest possible aid in gastro-intestinal conditions, it only remains for you to be sure of the exact condition with which you are dealing and also to be able to differentiate malignancy from benign conditions.

BOWLES BLDG.

One Way to Support Our Colleges

S. L. SCOTHORN, D.O.,
Dallas, Tex.
Chairman Department of Education

SURELY every practician in the country is vitally concerned with the problems of our schools and their ambitions to recruit promising young men and women to take our places as we drop out, in the perpetuation of our system and the development of it for mankind.

How many of us have taken into consideration the benefits which would accrue to our schools under the proposed national paid publicity campaign for osteopathy?

It is extremely difficult to interest ambitious young people in a business, institution or profession which is not successful. *Until the public knows and is able to observe that osteopathy is a successful profession, we can never hope to attract to our profession that portion of the public represented by young men and women who should become osteopaths.*

There positively can be no balance in a standard of professional standing—either we advance or we recede, and unless our progress is so marked as to be noticeable, it must appear that we are receding.

Without question, osteopathy has now the greatest opportunity it has ever had to strike out for the goal it seeks. Let us grasp that opportunity.

At present, our colleges exist through the unflagging and unselfish support of a few men and women, who bear burdens of responsibility far out of proportion to the responsibility we as individual practitioners assume. Now we can render worthwhile support to our colleges while at the same time furthering the interests of our science at large. Let's do our part.

Since January 15th how many of you have heard mentioned, Samuel G. Blythe's article in the *Saturday Evening Post* of that date? Mr. Blythe merely mentioned an American osteopath, and literally every D.O. in the country has had people speak to him about this.

Would not half pages of space in this national publication, entirely devoted to our science, create an agitation in our favor and a prestige which would lend additional attraction to our profession as the life work for ambitious young men and women?

Dr. H. C. Wallace has made an appeal to you for co-operation. Participation in this national paid publicity campaign will aid Dr. Wallace. You have your opportunity to do constructive work for our colleges right here.

Correspondence

THE NATIONAL HEALTH FILM SERVICE

The Who and What of It

A number of inquiries have come to Dr. W. A. Gravett asking him who is behind the National Health Film Service, the company that is caring for the distribution of the four reel film "The World's Greatest Factory-Man."

The Company

The company is composed of one of my patients, Mr. O. A. Brinner, and a few others including myself. Mr. Brinner, president of the Brinner Film Company, suggested the making of the picture "The World's Greatest Factory-Man" after reading the story in the Osteopathic Magazine.

As we were working upon the film the idea came to me that we might create a series of films dealing with all phases of health, similar to the items appearing in the newspapers, but in motion pictures. This appealed to Mr. Brinner and in order not to confuse this business with his other activities and also to have a name which would indicate the nature of the productions, we have organized the National Health Film Service.

We have placed the film "The World's Greatest Factory-Man" under our Company name for use by the doctors of the country in order to expedite its handling. The picture is now copyrighted and cannot be stolen by our imitators.

In this film we have tried not to make the word osteopathy too conspicuous, but accord-

ing to one of the individuals who saw the picture recently we have put in the "punch" at the close.

It is our plan in the Health Films, which we expect to sell to every theatre in each city and hamlet of the United States, to say something about osteopathy in a way that will sink home. Through the showing of these films we believe we can do much for osteopathy, as we will cover the entire country. Later we expect to supply motion pictures to the theatres of South America with all the film scenes described in Spanish.

It is the intention of the Health Film Service to furnish the theatre with one or two films a week during the life of the contract, which has a minimum of one year.

Yours for osteopathy,

EARL J. DRINKALL, D.O.

CHICAGO, ILL.

GREETINGS FROM CLEVELAND

To the A. O. A. Journal:

The osteopaths of Cleveland extend greetings to the osteopaths of the world and urge them to begin now to make their plans for the A. O. A. Convention in July. That you may know more about the city, that is to play host this year to the Osteopathic Association, interesting items of general information will appear from time to time in these columns.

The United States census of February, 1920, gave Cleveland the fifth place among the cities of the country with a population of 796,636. There are only six larger cities in the New World, two of them in South America.

The original mould in which Cleveland was cast was of the New England pattern. The lands in the northeastern corner of Ohio had been granted by the United States government to Connecticut, after the Revolution in the settlement of claims made by the seaboard states to western territory, under old colonial grants. The state sold the larger part of its possessions in Ohio to a group of Connecticut men known as the Connecticut Land Company. In 1796 that corporation sent a party of surveyors headed by General Moses Cleveland to lay out a town site at the mouth of the Cuyahoga River. The embryo city was named after its chief founder. After the usual hardships and discouragements of settlements in the wilderness Cleveland began to gather headway about 1830, when its population still numbered only 1,076. In 1836 the town was incorporated as a city and the census of 1840 showed that it contained over 6,000 residents. By 1850 there were 17,000 and from that time the rise of Cleveland was very rapid.

CLARENCE V. KERR, D.O.

CLEVELAND, O.

Symposium

1. *What are the pathologic conditions that maintain the osteopathic lesion?*
2. *How does the vertebral lesion affect visceral integrity?*

1. Primary lesion maintained by (a) Muscular contraction; (b) Ligamentous contraction; (c) Arthritis either bilateral or unilateral of articulations; (d) Exostosis following injury; (e) Rough articular facets due to trauma; (f) Faulty posture; (g) Structural change in the bone.

Secondary lesioned maintained by the primary lesion.

2. By irritation to the involuntary nerve supply, thus (a) nerves to muscular coat of viscera, resulting in spastic or flaccid condition, and (b) nerves to wall of artery to the part which would cause anemia or hyperaemia of the structures.

H. V. HALLADAY, D.O.

KIRKSVILLE, MO.

Definitions

Osteopathic: Influence on vital processes of bones; broadened to mean influence of mechanical disorders in producing disease and their role in the curing of such disease.

Lesion—Osteopathic: Any mechanical disorder or derangement from which arises any derangement or impairment of fuction in the body.

Etiologic Factors in Maintaining Lesion

1. *Mechanical*—Maintained by (a) change in relation of articular surfaces such that spontaneous return does not occur; surfaces probably beyond normal range of movement, Tension of ligaments involved in change of relation is an essential factor in maintaining it.

(b) Maintained by normal tensions of one side or part; ligaments of other side or part being stretched by posture or strain; as, from sleeping prone with face turned, produces lesions of atlas and axis.

(c) Maintained by natural efforts to secure balance in presence of lesion or warping somewhere else, usually below.

2. *Functional*—Maintained by (a) muscular disbalance from contracture of muscles secondary to visceral or nervous strain; or from swelling and edema, or paralysis of muscles.

(b) Softening of ligaments from thyroid insufficiency, or from swelling and edema, with loss of tension.

Medium Between Lesion and Disease

1. Direct irritation.
2. Confusion of co-ordinations.
3. Fatigue and strain.

(1) Direct irritation arises in parts pressed upon, or stretched in the mechanically maintained lesion. Normally it would cause pathological change only in the tissues affected. But all irritation is absorbed by sensory nerves and in the nervous system initiates changes based on its suddenness, its degree and its duration, the laws of which are within our knowledge.

(2) The body is made not of arbitrary mechanical parts, but of reasons. Disturbance of structure is disturbance of these reasons as much as in any logically built machine. Confusion of co-ordination is not only the result, but the state itself. It is in itself a pathological quality, affecting the whole nervous system; and it also causes efforts to recover co-ordination, with strain and a condition analogous to fright, which leads to exaggeration of reflexes, etc.

(3) Fatigue arises in muscles, ligaments, vessels, sensory and motor nerves directly affected, and in the co-ordinating centres reached by and those responsible for them. The further behavior of this element is fully within our knowledge.

E. E. TUCKER, D.O.

NEW YORK CITY.

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1. When a lesion of the spine occurs it is under stress of some kind of slip, sprain, fall, blow, injury, or some continuous strain which puts the joints out of their proper relation, one bone with the other. The pathology which takes place and maintains the lesion, in my opinion, is as follows: Under the stress which has taken place, the ligaments of the joint are over-stretched, and all the soft tissues are more or less injured which includes muscles, blood vessels, lymphatics, fascia and nerves. Diapedesis takes place, there is leukocytosis of the parts, red blood cells wander out into the tissues, circulation is more or less blocked and there is a congestion of the parts. As a result of all this, ability of the tissues is so damaged, the ligaments losing any power that they might have to draw the bone back into place, the muscles are in a state of tonic contraction so that there is no tendency to the return of the misplaced bone so far as the vitality of the tissues is concerned. If, at the time the lesion could be replaced mechanically and maintained in a normal position for a short time it would remain normal. This not being done the natural processes tend to heal the damaged tissues in the best way they can. The diapedesis and leukocytosis gradually clear up, the circulation is established, the congestion is removed, local irritation of the parts largely disappears. But in the whole processes fibroid tissue is deposited, there are more or less adhesions between the bundles of fascia and perimysium and epimysium of the muscles, also between the soft parts and the ligaments. This all tends finally to bind everything in its abnormal, mechanical relations and maintain the lesion often against strenuous efforts to correct it. A long continued malposition will frequently, through the natural processes, change the shape of a bone which adapts itself to its new position.

2. It has been advocated by some that the twist of a vertebra decreases the size of the intervertebral foramen and causes pressure on a nerve to some of the internal organs which prevents their normal physiology. It would be a very extreme case where a lesion would be sufficiently large to cause bony pressure on a spinal nerve in the foramen because the foramen is about five times larger than the nerve which passes through it. My opinion is, that the congestion and the thickening of the soft tissues, also the stretching of the tissues about the vertebral foramen, are the conditions that enter into the situation to produce pressure on nerves, if there is any pressure. It is logical that there is pressure. However, the damage to the tissues from the stress, no doubt, frequently includes damage of the nerves which may be no more than a slight wound with diapedesis and congestion, or it may go to the point of extravasation in or around the nerve. Whatever this damage to the nerve is, it interferes with the functioning of the nerve to the internal viscera to which it is distributed. We will find a symptomatology manifested according to the viscera which the nerve supplies.

C. C. REID, D.O.

DENVER.

Every joint has a capsular ligament usually reinforced in places by which movements of the joint are restricted. Practically all joints have movement. When the movement of the joint has been carried beyond the physiological limit a pathological condition is induced. Technically there is always a displacement of the joint when the range of motion is carried beyond the normal.

Usually when the force is released that carries the motion to a pathological degree, that is, displaces the joint, the bones regain their normal position. In many instances they do not, therefore a lesion is one in which a pathological movement has been induced re-

sulting in (1) prolonged or persistent malalignment, or (2) injury of the capsular ligament with restoration of alignment but a resulting exudate that produces pressure on adjacent tissues.

If a vertebral joint is involved, this pressure affects the size of the spinal foramen or foramina, thus involving the nerves and vessels contained therein. Irregularity of contour either bony or ligamentous with tenderness, if at all recent, is the best indication of lesion. Re-establishing the function of the joint, that is motion, is the cure (1) by restoring alignment or (2) repeated passive motion to assist in absorption of the exudate, which basing my opinion on many dissections, I believe to be much more common and important in chronic cases.

M. E. CLARK, D.O.

INDIANAPOLIS.

Dr. Clark emphasizes the importance of the exudate about the lesion. Probably this is a point that is frequently overlooked. Dr. Still cautions the osteopath about attempting too much correction during the first few treatments. His point is that nature will materially assist in clearing up the exudate if given careful treatment and sufficient time. The reader is also referred to Dr. Blakeslee's article on nephritis.—*Editor.*

Hilton's Law: "The same trunks of nerves, whose branches supply the groups of muscles moving a joint, furnish also a distribution of nerves to the skin over the insertions of the same muscles; and—what at this moment more especially merits our attention—the interior of the joint receives its nerves from the same source." Hilton goes on to say, "This implies an accurate and consentaneous physiological harmony in these various cooperating structures." A lesion, therefore, through its connections of joint and muscle tissues would so mechanically stimulate the nerve to contract the muscles and tissues around the lesioned joint as to hold it indefinitely malpositioned, provided the lesion was of any extent.

The lesion affects visceral integrity by perversion of either nerve supply or blood supply; this results in perverted function and if kept up too long disease will follow.

L. J. BELL, D.O.

HELENA, ARKANSAS.

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(1). Muscular imbalance is one important factor in maintaining the bony or ligamentous lesion and in fact, may in itself, constitute the lesion with most if not all of the effects of a typical subluxation.

This condition of imbalance may be caused by: (a). Direct or reflex stimulation resulting from the primary lesion and causing a hypertonic condition of certain muscles or groups of muscles thus maintaining an abnormal pull upon the bones and ligaments in lesion. (b). This hypertonic condition tends to decrease nutrition to the affected part by decreasing arterial supply to and venous and lymphatic drainage from the lesioned area. (c). The law of "overstimulation equals inhibition" may explain another method by means of which a general lack of tone would result about the area of lesion.

(2). Developmental structural imbalance, the theory recently advanced by Dr. Goetz, that of pathomorphology of imperfect development, would surely have much to do in the maintenance of the acute lesion. Consider for example, an abnormal pull caused by faulty rib curvature upon a thoracic vertebra or group of vertebræ in lesion.

(3). Peripheral reflex stimulation, that is, the constant or long continued stimulation of some spinal center coming reflexly from some structure to that spinal center, may result in a condition of first, hypertonicity or tension of the musculature about the area and later a condition of hypotonicity or relaxation and weakening of the structures about the spinal area affected. The conditions causative of decreased nutrition to the area as stated above would also apply here. To illustrate, it is well known that lesions of the lumbar region are frequently maintained by irritations of the abdominal viscera and that correction of such lesions is often difficult if not impossible until the intestinal or other visceral irritation is relieved. Likewise lesions of the cervical region may result from, or at least be maintained by the irritation of some focal infection about the head or neck.

There are, therefore, as it seems to me, these and perhaps various other factors, one or more of which may be concerned in the maintenance of the lesion.

To answer the second question in full would require an extensive and very important chapter in osteopathic physiology because the functions of the different viscera are so varied that their response to the lesion varies greatly. In general, the problem may be answered by considering the different groups of viscera separately, and then summarizing the whole. Let us consider acute lesions first.

Circulation and Respiration: Experiments on living animals show that an acute (recently produced) lesion of the upper thoracic, for example, results first in a condition of hyperstimulation of all of the functions involved. The heart beat is increased in rate and amplitude and this with the increased tonicity of the vasoconstrictors and the increased muscle tone due to exaggerated efferent nerve force

to the muscles, results in an increase of blood pressure. Respiration is also somewhat increased due to the reflex stimulation of autonomic centers. This results in a false increased body energy. False because it is only temporary, resulting from an abnormally hyperstimulated nerve mechanism. This hyperirritation and imperfect oxygenation from faulty respiration in turn, results in a depletion of potential nerve force and in time, the appearance of certain more or less characteristic symptoms of "nervousness" sleeplessness and general nervous imbalance.

If the lesion is maintained, becomes chronic, the reverse of these perversions usually results. There is a general lack of tone or decrease in function in proportion to the exaggerated functions resulting from the acute lesion.

The Digestive Organs respond to lesions in a similar way to that of the circulatory organs. It has been repeatedly demonstrated upon animals that acute lesions cause increased secretion in the liver, stomach, duodenum, and kidneys and this increase has been actually measured. It has also been shown that the opposite effect results from chronic lesions.

One and the same spinal lesion is not necessarily causative of increased function in more than one viscus and the most common result is, therefore, physiologic imbalance.

The irritation to the nervous system, the decrease or partial exhaustion of potential nerve force may and perhaps does result from most acute spinal lesions. We have, then, in all acute spinal lesions, the exaggeration of the functions of one or more of the viscera with a general decrease of nerve tone and this results in turn in a condition of physiologic imbalance, the extent of which varies with the essential integrative functions of the structures affected.

Every cell in the organ bears a certain functional relationship to every other cell of that structure, every organ of the body bears certain functional relations to every other organ, and the maximum of perfection of the various functions of all cells and organs renders to the body as a whole, the sum total of perfect function or health.

It would be possible theoretically, at least, to trace the effect of an acute or chronic lesion affecting any viscus and its secondary influence upon other viscera and upon the sum total of body function, but in general it may be said that the perverted function of any one viscus affects integratively all other viscera, and, most markedly, those in nearest functional relation with it.

J. Deason, D.O.,

Chicago

Current Comment

"POURING WATER ONTO THE FIRE"

The older osteopaths in the field will remember an axillary method presented by the Old Doctor, which he described as "pouring water onto the fire"—this axillary method being similar to the axillary technique offered by Dr. C. E. Miller in the treatment of acute infections through the lymphatics. While it may require ages of scientific research to settle the interesting discussion between Doctors Miller, Millard and Tasker, we all know that results usually follow the application of technique presented by Dr. Andrew Taylor Still. There is satisfactory proof in my own practice as testimony of the Old Doctor's axillary method. Yet I am inclined to think that the results were not in response to local manipulation of the axillary region, or local "milking" of lymph channels, but that they were due to vasomotor action taking place at the second dorsal, or thereabout, brought about indirectly through leverage exercised upon the first and second ribs. For instance, Dr. Miller in describing his technique, says "Place the four fingers of the hands in the axillas and the thumbs just below the clavicles over the points where the thoracic duct and the lymphatic duct empty into the venous circulation, by an upward lift of the fingers in the axillas followed by a downward pressure with the thumbs just below the clavicles." If I am not very much mistaken this upward lift with the fingers in the axillas and the downward pressure with the thumbs just below the clavicles exert a marked leverage upon the first and second ribs, thereby elevating them at their sternal ends and forcing them downward at their vertebral ends and establishing a strong leverage point at the second dorsal. Try

the method out for yourself, and see if I am mistaken, by having an osteopath follow out Dr. Miller's technique upon your own axillas. You will likely note the leverage taking place in the first and second ribs, and feel the effects therefrom by a vasomotor change, noticeable in the head and other channels of the blood stream. In connection herewith let us keep in mind that lesions in the vicinity of the second dorsal are as common as elsewhere, and that this area is always found tense and rigid influenza, pneumonia and various other acute complaints. I believe that the application of proper technique at the second dorsal area is bound to bring satisfactory results, whether applied by indirect leverage of the first and second ribs or specifically. Good results are accomplished by merely getting my fingers or thumbs as far beneath the scapula as possible and exerting a downward pressure upon the angle of the second rib and holding it in this position firmly and gently for a few minutes. I have seen rigid cervical tissues relax without any local treatment thereto, following this pressure upon the second ribs. "Tell me the moment when the blood flow is altered and I will tell you the moment when disease begins," said Dr. Still. The second dorsal area is proving to be a great vasomotor center, in my practice at least.

W. G. Sutherland, D.O.

Mankato, Minnesota.

HYDROTHERAPY IN PNEUMONIA

It is instructive to note the hydrotherapeutic measures employed by Baruch (An Epitome of Hydrotherapy) in pneumonia. He claims marked success in the treatment of this disease. He guards against overfeeding. In regard to drinking water, he prescribes one ounce of ice-water, not above 40 degrees F., every hour; this produces abundant diuresis. Plenty of fresh air is a necessity. "I prefer a good fan in a room to exposing the patient outdoors, because the latter would exclude the application of another and better vasomotor stimulant to be presently referred to." His only drug is one dose, not repeated, of six to ten grains of calomel. This is placed dry in the mouth and washed down after rinsing, in order to destroy the pneumococci in the mouth and remove fermenting or toxic material from the gastrointestinal tract.

For hyperpyrexia with nervous symptoms there is no procedure equal to a tub-bath of 90 degrees F., of half an hour's duration, the patient being afterward wrapped in a linen sheet and allowed to dry in bed. In most cases of pneumonia of children a ten-minute friction bath at 95 degrees F., rapidly reduced to 90 degrees F., answers all purposes. If pleurisy be present the tub-bath must be avoided.

The only local application that I constantly use is the wet compress at 60 degrees F., applied around the chest every hour, after it has become warm. This is made of three thicknesses of thin or two thicknesses of heavy old linen cut to fit the thorax snugly and to cover the entire chest from the nucha and clavicle to the last rib. It is wrung out of water of 60 degrees F., spread upon a piece of flannel cut in the same shape, but one inch larger, one-half of the flannel and damp linen is gathered into a fold, the other spread on the bed; the patient turns on one side, the folded part is placed next to his side, so as to reach the nucha at the top; the patient is asked to turn on his back. As he turns upon the outstretched portion of the compress his arms are raised, the folded part of the compress is drawn from under him, and is quickly thrown over the chest to meet the other half; the upper flaps are brought over the clavicle, the flannel is wrapped over the compress and secured by safety-pins in front. The patient now lies in a snug cold vest, as it were. The rationale rests upon thermic excitation of the cutaneous terminals, which is conveyed to the central nervous system and reflected upon the heart and lungs, improving the pulse and deepening respiration. In five or more minutes the temperature of the compress is equalized with that of the skin, gradually the linen warms up, and very soon the patient lies in a moderately warm poultice. If oiled silk were used as a covering of this compress it would become a hot poultice. To avoid the relaxing effect of the latter a flannel covering is used, which permits escape of heat and moisture by capillary attraction, which favors the cooling process. When the compress is found warm on examination with the fingers, after the lapse of an hour another is prepared before the first is removed. This hourly envelopment of half the trunk in water 60 degrees F. below that of the skin produces the following striking therapeutic effects:

As the four-hourly friction baths prevent heart failure in the toxemia of typhoid fever, so does the hourly colder but more evanescent wet application in the toxemia of pneumonia. This is proved by the improvement in the tension and rate of the pulse. The pulmonary circulation is probably affected directly, in view of the fact that its vasomotor supply is derived from the second to the seventh dorsal ganglia, which are connected with the epigastric an scapular reflex area in the skin. The latter are covered by the chest compress when properly made, not otherwise.

In the toxic forms of pneumonia the hourly stimulation of the central nervous system is evidenced by a brightening of the countenance and disappearance of dullness of intellect. Intelligent patients have referred to a longing for the time of renewal of the compress. Alcoholic or other stimulants have become unnecessary in cases seen early. In consultation cases I have guided by the temperature, toxemia, and

pulse in lowering or raising the temperature and duration of the compress, according to the hydrotherapeutic law that "intensity of action is in proportion to the difference of temperature between the skin and water."

In infectious fevers the urotoxic coefficient is increased five-fold by cold baths according to Hewetson, of Johns Hopkins Hospital and others. That there is an enormous increase in the quantity of urine (ranging from 70 to 110 ounces) when small quantities of ice-water are used in connection with the regular cold chest compresses is easily demonstrated. If the measurements had not been made by trained nurses they would be incredible.

An ordinary rise of temperature does not require treatment. The chest compress at 60 degrees F. has served me well in maintaining a safe temperature. Its antithermic effect may be considerably enhanced by permitting as large a quantity of water to remain in the linen as would not interfere with the patient's comfort by dripping and chilling. In this manner more heat is abstracted and more water is evaporated by capillary attraction, through the meshes of the flannel cover. Extra towels are necessary under and over the compress to prevent the sheets becoming too damp.

Experiments made by myself in the Hydriatric Institute and by the house staff of the Montefiore Hospital have demonstrated that cold applications to the large skin surfaces increase the number of white cells in blood drawn from the lobe of the ear, showing that they have been driven from stagnant points into the circulatory current where their phagocytic action may become more effective.

Hiektoen concludes a recent able article, "That the leukocytes constitutes an integral factor in the defensive mechanism of the body against the pneumococcus must be accepted as settled."

It is very evident that the success of hydrotherapeutic measures, like other methods, depends upon preciseness of technique. With careful and thorough osteopathic work coupled with scientific hydrotherapy, the osteopath without question can successfully treat a large percentage of pneumonia cases. It is well to remember that through attention to the abdominal region and diaphragm marked effect, upon the general circulation and elimination, can be obtained, as well as upon the lungs and heart. This work should be carefully performed, paying due regard to the general condition of the patient and the character of the pathology.

OSTEOPATHIC INHIBITION AND STIMULATION

Here is an interesting question by Dr. Goetz in his article, *The Osteopathic Physician*, December:

We as a school are positive that adjustment of lesioned vertebrae—because it re-establishes normal conditions at the intervertebral foramina, removes the pressure—is the proper treatment for perverted functions or organic imbalances in the organs. True our evidence is almost wholly clinical; we get such controls, i.e., inhibitions and stimulations of nerve-force in the presence of abnormal functioning of the organs. Purely physiological inhibitions or stimulations can not be obtained because we can not by our treatment exceed the normal. This last statement is open to discussion and proof so I put it in the form of a question. "Can we by osteopathic adjustment obtain purely physiological inhibitions or stimulations?" If so, how?

H. M. Still, D.O., writing of Early Recollections of the Old Doctor, *Osteopathic Truth*, November-December, says:

Once after one of his talks a fine looking old gentleman stepped up and asked if he could do anything for insanity. Father's reply was, "I will not be able to give you my opinion until after I examine the case." It happened his daughter was in an asylum in the same city where we were located, so the next day the patient was removed to her home. Father and I went to the place and the young lady was almost raving. She did not know her people. With some difficulty she was placed on the bed. Father immediately examined her and in a few minutes instructed the parents to let the patient up. The father and mother said, "Doctor what do you think?" My father replied, "I think she is going to get well, as I have just removed the cause," which was a lesion in the third cervical, due to a fall. This, of course, caused a great deal of rejoicing with the father and mother, and I can truthfully say before we left the house the young lady recognized her parents.

It is interesting to note that Dr. Still secured many quick results, showing conclusively that definite specific work eradicated important etiological factors. Of course the patness of specific work is just as important today as heretofore. This is a point, definite adjustment, that Dr. Still always insisted is essential. Naturally there are many organic conditions where results are not so startling or spectacular. Note particularly the extremely careful work over a long period of time that Dr. Blakeslee outlines in the case reports of his article on nephritis in this issue of the JOURNAL.

Strain of the tendo Achillis and sometimes inflammation of the bursa under the tendon are not rare. This condition is really very disabling, especially to men on the march.

A simple device to relieve strain consists in raising the heel of the boot on the affected side half an inch. The patient thus unconsciously does more work with the other leg and avoids strain of the tender tendon. It is obviously of no use to raise both heels, for then the work thrown on both feet would be equal, and the desired effect would not be produced.

It is really practicing a species of deception on the patient's sense of balance, but it is very effective in many cases.—**Oxford Surgery.**

Current Literature

G. V. WEBSTER, D.O., Editor
Carthage, N. Y.

An article of particular interest to members of the osteopathic profession is published in the *New York Medical Journal* (November 20, 1920). It was delivered as an address by C. Ward Crampton, M.D., before a gathering of medical men in New York City. It is so full of suggestion that it is quoted from freely. After defining good and bad posture he proceeds to classify the various ptoses under four heads.

Types of Ptosis

Skeletal ptosis is the downward displacement of bones, and is shown in the drooping of the head, the exaggeration of the normal curves of the spine, the falling in and down of the chest. These cause a decrease in standing height as compared with horizontal length, a comparison which is a definite test of poor skeletal posture. The less the decrease in the standing height, the better the posture. Skeletal ptosis is caused by weak tone, or the relaxation or chronic weariness of the muscles which hold the body erect. It is the natural adjustment of the body to fatigue.

Visceral ptosis is the downward displacement of the internal organs and is usually accompanied by skeletal ptosis. It may be local, that is one organ only may be displaced; or general, in which case the whole body contents sag downward. In the latter case the chest is flattened, its capacity is decreased, and the abdomen becomes protuberant, the lower ribs often bulging. It is the result of constitutional inferiority, low vitality or bad habit. Its presence may be ascertained by percussion of the organs to determine their position, by the use of the X-ray and by comparing the girth of the chest and the abdomen.

Circulatory ptosis is the downward displacement of blood and its collection in the abdominal veins and arteries. The splanchnic veins in the abdomen form the most capacious system of blood vessels in the body, and if they are relaxed and distended, a large amount of the blood which should be in other parts of the body drains into them. In the erect position, these vessels continually work against the force of gravity. They are kept from distention by the contraction and tone of the muscles in their walls, which are under sympathetic nervous control, and by the contraction and tone of the walls of the abdomen. If there is an insufficiency of nervous control or if the abdominal wall is weak, permitting relaxation, the resistance to the pressure of gravity is lessened and ptosis results.

An emotional ptosis is a depression of the spirits. The terms dejected, depressed and downcast are all derived from descriptions of physical states. By racially old practice and habit these expressions are applied to emotional states and refer to unpleasant feelings of the asthenic type. Other more or less colloquial terms are downhearted and down-in-the-mouth. These terms, descriptive of emotional ptosis, derived from physical conditions, indicate the correlation between the mental and the physical.

The picture in good posture is given thus:

In good posture the outline of the body from the neck downward over the abdomen is convex, particularly over the thorax. In bad posture this line is concave except for the slight projection of the pectoral muscles. The chest in good posture is deep, the abdomen slim. In bad posture the contents of the abdomen simply drop downward and cause a bulge at the lower waistline. The two photographs clearly show the difference in aspect. The one posture is high, straight, elevated, inspired and strong; the other lax, depressed, downcast and weak.

How to Get Good Posture

1. **Description.**—In our endeavor to get good posture, children should be informed in a lively interesting way as to what it is. Emphasis should be placed upon the high head, lifted chest, straight back, etc., choosing words which will be of use afterward as elevation cues. Little time, however, need be wasted upon description for the most important thing for the people to know is how it feels to stand in good posture. Before the class, the teacher should demonstrate the various points contrasting the good high erect posture with the lowered poor posture.

2. **Demonstration.**—The teacher of physical training experiences the greatest difficulty in making his pupils understand just why their postures are wrong, and furthermore what kind of effort they should make to correct the bad postures. This was the great fundamental difficulty in the endeavor to get school children to stand up straight. They had been told to stand up straight, but did not know how. Usually they threw the shoulders back and in an endeavor to throw the chest out, stick out the stomach, drawing the hips forward, stiffening the arms straight down to the sides like pokers. This is wrong.

3. **Experience in good posture.**—There are various devices used to put children in good posture. The first one is the use of commands called elevation cues because they are calculated to work against ptoses. The most important of these are as follows: Stand tall, head up, head high, lift the head, stretch the head upward, chest high, and lift the chest.

Waist flat, lift the waist up, stretch the knees, lift upward from the ankle, and stretch the body upward—all these cues result in increased action of the muscles which keep the body erect. Additional colloquial adjurations

may be used by the teacher such as, "try to make the head touch the ceiling," "stand as if you were looking over a fence," "pick up your ears," "make believe you are a soldier," "grow up tall," etc. The commands "chest out," "shoulders back," "hips back," "chin in" and others calling for anterolateral adjustments are discarded.

The physical signs of pneumonia in children by S. A. Blauner, *New York Medical Journal*, (December 25, 1920), offers several practical points in diagnosis.

In the diagnosis of early pneumonia the percussion note is the most important sign to be depended on. We must remember, too, that a child's chest is very resilient and its lungs highly elastic, and a slight change in percussion note will often be overlooked unless we use the lightest stroke so as to throw as little of the surrounding chest into vibration as possible. The child must be placed in a position, preferably supine, so as to relax the entire musculature of the chest thoroughly, otherwise tension of the muscles on one side will give a higher note, with the possibility of a mistake in diagnosis. In the early diagnosis we must not depend on any auscultatory assistance for even rales in the pneumonias of childhood are as often absent as present. A child may go through a pneumonia without a rale and even in the stage of resolution none or very few rales may be heard. Because of this marked variation of the presence of rales I teach my interns not to place too much interpretative value on rales in a chest. They indicate a pathological process, but the exact nature of this process it would be difficult to state because of this variation. As the process continues the auscultatory changes begin to come to the fore. The breathing becomes high pitched, bronchovesicular, and then bronchial, with or without rales.

All that has been said above holds true for the lobar type of pneumonia and not for the broncho-pneumonia type. Because of its different pathology and the usually accompanying bronchitis the patches are frequently too small to be detected by percussion note, and, for that matter, even for the radiograph. Frequently, with otherwise positive signs of bronchopneumonia, a radiograph will often be negative, and we, therefore, have learned to expect little confirmation from the X-ray findings, and unless the patches become confluent and more or less massive we can find few signs except those of a fine bronchitis. Because of this bronchitis with tenacious mucus in the finer bronchioles, unaffected lung vesicles about the bronchopneumonic patches may be put in a state of atalectasis or high tension and, therefore, either apparently extending the consolidated area, enabling us to obtain a dull note, or overshading the bronchopneumonic patch, giving a hyperresonant note. Aside from these slight percussion changes in nonconfluent bronchopneumonia we have little to expect in the way of physical signs except those of a bronchitis. As far as bronchial breathing is concerned it is most frequently absent for the very reasons I have explained that the patches are usually noncommunicating with a sufficiently sized bronchus, or have reached the hilum of the lung.

The physical signs of resolution in lobar pneumonia in children are somewhat different from those in adults. As a rule, resolution in adults takes place en masse, a quick liquefaction of the consolidated area and the presence of the characteristic rales redux. In children the same thing may occur, but just as often the resolution is a slow process extending from three to seven days, the percussion note and bronchial breathing if present slowly diminishing in pitch until normal vesicular sounds are heard. Here, too, rales play an unimportant rôle, for frequently a child will go through the resolution stage with very few rales or none at all.

Dr. Jacob Meyer in the *Journal of Nervous and Mental Diseases,* summarizes thus the results of investigations as to the causative agent in lethargic encephalitis.

Summarizing these views, we may classify them into the following divisions: (a) that the disease is due to food poisoning (botulism), which has been disproved; (b) that it is a form of poliomyelitis, which has also been disproved; (c) that it is due to virus; (d) that it is a cerebral form of influenza; (e) that it is due to a parasite allied to a trypanosome, and (f) that it is due to a microörganism as yet unknown.

The results of Endocarditis are so frequently met in general practice that any suggestions tending toward Prophylaxsis is welcomed. Commenting editorially on an article in *"Prescriber," The Medical Record* (December 18, 1920), says:

Dr. G. Arbour Stephens gives some original views on endocarditis and its treatment. He points out that for none of the diseases in which this condition is liable to occur—rheumatic fever, scarlet fever, tonsillitis, pnuemonia, cancer, gout, diabetes, and Bright's disease—is there any specific treatment, and that consequently treatment is restricted to preventive measures. He defines endocarditis as an exudation disease, as is evidenced by the vegetations, which are composed of elements derived from the blood. The next stage in the development of the theory is that the disease in which endocarditis occurs is an exudation disease, and as an exudation disease is that condition in which the calcium content of the body is reduced below normal, the obvious treatment is to increase the calcium content by appropriate dietetic measures, that is, if the theory be correct. Stephens insists that the diseases mentioned occur more frequently in those whose calcium content is low and, moreover, draws attention to the point that the greater tendency to endocarditis in the young, when the calcium metabolism at dentition and puberty is under its most severe strain, must be taken into consideration, as

well as the fact that heredity probably plays a part in the causation of most of these diseases. Heredity, like pedigree, is almost synonymous with bone, the great lime-containing organ, and apart from a mere tendency, the bad feeding habits of the mother are readily indulged in by her children.

If then these diseases are, as Stephens says, of the "exudation class," due to a lowered calcium content, and also to a perverted or acid appetite, the only rational way of dealing with them is by considering and modifying the food supply of the people. Clean, healthy food, including a pure milk supply, fresh laid eggs, and home-made cheese, should be the staple articles of diet, rather than the oversalted bacon, badly cured fish, and can-preserved food which seem to appeal to the appetites of today. Even if Stephens has somewhat exaggerated the importance of the calcium content of the body in the diseases he has referred to, there is no doubt, as Dr. Aulde in this country so eloquently argues, that a low calcium content is prejudicial to health and indeed signifies an actual condition of ill-health. The common-sense treatment of the condition and the preventive treatment of certain predisposing diseases consist almost wholly of dietetic measures.

The New York Medical Journal (January 1, 1921,) suggests editorially the co-operation of all scientific observers to the end that health and healing may be more abundant.

The general use of the various publications, federal and state, agricultural, biological and health departments, will provide the members of the profession with much data of distinct value to the physician in active practice. Many of these bulletins can be had for the asking and the information presented represents the research work of specialists in particular lines.

Under the term agriculture, doctors are now to study all that pertains to foods and breeding and to drug production. The farmer, the veterinary, the botanist, the chemist, will henceforward find a place at medical meetings, for the gentle cow, the frolicsome lamb, the silvery fish may harbor disease in life and give it to man when dead. Plants themselves have foes, which make them enemies of man. Epidemics destroy our stocks, thereby the price of food is raised and people suffer in health. So that the whole science of healing seems likely to resolve itself into the great question of co-operation of the entire scientific world, for, truly, no one body can be rejected without loss to the whole.

The Boston Medical Journal, (December 16, 1920) gives a valuable article by Dr. O. E Otis on the differential diagnosis of tuberculosis. His conclusions are summarized as follows:

1. Tuberculosis is much oftener missed than is non-tuberculosis diagnosed as tuberculosis.

2. Most non-tuberculous diseases of the lungs occur in the middle or lower lobes.

3. When the apex is clear only positive sputum should justify a diagnosis of tuberculosis.

4. Most non-tuberculous diseases of the lungs are comparable only with advanced tuberculous disease.

5. When tubercle bacilli are absent after repeated examinations the disease must be referred to some other cause than tuberculosis, even if the symptoms and physical signs are those of an advanced tuberculosis.

6. Do not condemn a patient as tuberculous upon a suspicion.

7. Spitting of blood may come from many causes, and alone does not justify a diagnosis of active tuberculosis.

8. The differential diagnosis of tuberculosis is sometimes difficult or impossible at the first examination, and only time and observation can finally solve the problem.

THE AMERICAN OSTEOPATHIC SOCIETY OF OPTHALMOLOGY AND OTO-LARYNGOLOGY

The following excerpts are taken from the Second Quarterly Issue:

Intralaryngeal Technique, C. W. Young, D.O.:

If one extends two or more fingers, palm downward, into the mouth, he can palpate the epiglottis with its upper border pressing firmly against the roof of the mouth. Often the forefinger can be pressed firmly against the lower border of the epiglottis, and a downward pressure can be given so as to release the pressure of the epiglottis against the roof of the mouth and permit the large finger to pass over the upper border, and then the other finger or fingers can follow. Sometimes the large finger can insinuate its way over the epiglottis and sometimes the forefinger and large finger can work together. Sometimes you can ask the patient to cough, and as he does so, he must loosen the grip of the epiglottis, and then you can quickly slip your fingers into the laryngeal cavity. The epiglottis is a loose cartilagenous flap with its lower end fastened between the wings of the thyroid cartilage just below the lower end of the tongue. The large finger in the pharynx can palpate the superior aperture of the larynx. It is probably the presence of the true and false vocal chords and epi-laryngeal folds that makes it so difficult for the larynx to disgorge itself by discharging the clotted or sticky mucus from the cavity of the larynx. And here it is that mechanical adjustment can play an important role in assisting nature to adjust itself to normal. Place the large finger over the aperture and then make a sweeping movement foreward,

pushing against the lower end of the epiglottis and the patient will be made to cough violently and bring with the cough mucus that could not be disgorged without help. Sometimes the finger can press against the posterior wall of the larynx or even down to the posterior wall of the trachea, and promote the loose cough and free expectoration. Sometimes the fingers can spread apart the cords extended over the superior aperture. This drainage of the laryngeal cavity can be secured in a measure by traction of the dorsum of the tongue described by Dr. Edwards, and in some patients this traction is sufficient. In some few cases it is difficult to enter the pharynx, and one must be content to do what he can by tongue traction. Place two or more fingers firmly on the tongue as near the lower end of the epiglottis as possible and pull forward. In some cases one can try tongue traction and then try traction with the finger over the superior aperture of the larynx and below and against the epiglottis, and prove to his own satisfaction as to which method is superior as a means of securing laryngeal drainage.

* * *

The treatment can usually be given to best advantage several hours after a meal, though some can take it after a good meal without becoming nauseated. Usually there is little or no nausea or gagging, especially if the physician avoids touching the posterior wall of the pharynx. After the patient realizes the value of the treatment, and has thus lost all fear, he can take the treatment with very little discomfort. It is never as distressing as the finger penetration of the posterior nares.

* * *

Warm Moist Ether Vapor, Harold A. Fenner, D.O.:

Ether can be used in the majority of cases with the best results. It requires the least skill of administration, with a minimum of harmful results to obtain prolonged anesthesia. What concerns us most in the practice of laryngology is an anesthetic that will give maximum results in a minimum of time. The administration is simple, apparatus is light, compact, readily portable, and uncomplicated, using the least amount of ether, yielding the best results with practically no after effects.

* * *

Gwathmey's experiments prove that warming the ether vapor lessens its toxicity. Those of Goodfellow prove that by warming the vapor it requires less anesthetic and holds the throat more perfectly. Drost's and my experiments prove that by warming, moistening, and delivering ether vapor warm to the pharynx the amount of ether required to hold the throat still and the time taken to produce anesthesia is reduced about one-half under that required when simple warming is resorted to. The stages are shortened, secretion of saliva and mucus lessened, skin and alimentary tract practically not irritated. Post-operative vomiting is rare and recovery from the anesthesia is very rapid. Transitory albuminuria is decreased 50 percent by our methods.

* * *

The Deflected Nasal Septum an Osteopathic Lesion, L. V. Cradit, D.O.:

With a marked degree of deflection or deformity, symptoms of obstruction to respiration or drainage are presented. There is inability to breathe freely, especially through the obstructed side, and this is usually worse at night, often causing mouth breathing. Catarrhal inflammation soon develops behind the obstruction, first affecting the nasal mucous membrane but later the pharynx and even the larynx and bronchi. Discharge, cough and alteration of the voice are common. The deflection may cause a blocking of the drainage of one or more of the nasal accessory sinuses resulting in headache, vertigo, aprosexia, or a true focal infection. In young persons defective development, especially of the chest, and impairment of the general health are among the results. A deflected septum together with adenoids is, in my opinion, one of the causes of faulty development of the chest with its train of resultant conditions such as malnutrition, tuberculosis and many of the diseases that a lack of oxygen is concerned in. It predisposes to a lowered resistance of the entire body.

* * *

The surgical correction of the deflected septum is the only proper procedure to follow as a means of treatment.

In the Discussion, Dr. Deason says:

A crooked septum is not an indication for operating. If there is a thickening in the region of the inferior turbinate and thus shutting off the nasal space which will not permit any enlargement, then that septum should be removed. The mere fact that the nose is bent doesn't mean anything. Every one of you has had either a middle turbinate or inferior turbinate which filled up the space and become a cellular structure. I think it is important to take out not too much septum. Draining of the sinuses in some cases will make enlarged turbinates go down.

* * *

Hygiene of the Nose and Throat

A remarkable and close correlation exists between the condition of a child's nose and throat and the degree of intelligence it manifests. The reasons for this correlation are not apparent. One would expect to find such a correlation to exist with hearing and vision but such is not the case in our experience. The conditions of greatest importance and most common occurrence are sore throat, hypertrophied tonsils, adenoids and nasal obstructions. These require suitable medical or surgical treatment for alleviation. —Boyd, *Practical Preventive Medicine.*

The pituitary gland probably corresponds to the strainer gland in the fish stage, and in the course of development was left within the skull instead of on the side of the pharynx. It contains elements derived from the pharyngeal mucosa, and many of its tumors show pharyn-

geal heredity. Is it possible that this gland, which is so important in the growth of the body, is favorably affected through improved circulation by the removal of diseased adenoids and tonsils? Certainly one often sees a child of slow development, after an operation for removal of tonsils and adenoids, make a most striking physical and mental gain. W. J. Mayo, Relation of the Development of the Gastro-Intestinal Tract to Abdominal Surgery, *Journal A. M. A.*, February 7, 1920.

A REVELATION IN OSTEOPATHIC SURGERY

PARALYTIC CONVERGENT STRABISMUS

Performed by

T. J. Ruddy, D.O.
Los Angeles, California

Reported by Dr. Charles C. T., Jr., B.S., LLB., D.O., recent graduate of the Eye, Ear, Nose and Throat Department of the Graduate Department of the L. A. C. of O. P. and S.

Patient: Miss G. Gold, Los Angeles, Cal., 15 years old. Paralytic Convergent Strabismus of left eye from birth.

Operation: *General anesthetic*—five (5) steps to operation, which consisted of a transplantation of a portion of both the Superior Rectus and the Inferior Rectus into the External Rectus.

First Step: A curving incision through the Conjunctiva and Episcleral Connective Tissue, beginning one centimeter to the medial edge of the Superior Rectus and extending one centimeter beyond the medial edge of the Inferior Rectus, said curving incision having a radius from the Limbus of 2½ centimeters.

Second Step: The heads of the Superior and Inferior Recti were engaged with Strabismus hooks and carefully divided into three equal portions, the incisions extending ¾ the length of each muscle.

Third Step: The central portion of each muscle was next divided at its insertion into the sclera. then tucked under the lateral portion, carried to the External Rectus and sutured to it as near to its insertion into the sclera as possible. By so doing the Superior and Inferior Recti have two equal portions of live muscle left intact while the External Rectus has the same, one portion coming from the Superior Rectus and one portion from the Inferior Rectus.

Fourth Step: Consisted in a partial tenotomy of the Internal Rectus.

Fifth Step: Consisted in a suturing of the original incision in the Conjunctiva.

Resume: Though this operation has never been attempted in detail before by any surgeon, one dissimilar attempt has been referred to in all the literature I have been able to find on the subject. In this operation, though, which, by the way, proved a failure, the surgeon did not divide the Superior and Inferior Recti into three equal portions using the central portion for transplantation, but instead divided the Superior and Inferior Recti into two divisions, using the lateral portion for the transplantation. This division of the Superior and Inferior Recti into two equal portions left the muscles too weak, and the failure of the operation came from the production of rotation of the eyeball and followed later by the rupture of the portion of the Superior Rectus left intact

Time of Operation: One hour.

Dr. Ruddy reports four similar operations in his private practice with 100 percent results in all four cases.

BOOK REVIEWS

Radiography of the Chest, Vol. I., Pulmonary Tuberculosis—By Walker Overend, M.A., M.D., Hon. Radiologist and Physician to the Electrotherapeutic Department, East Sussex Hospital (Hastings); Radiologist to the City of London Hospital for Diseases of the Chest. Cloth. Price, $5.00. St. Louis: C. V. Mosby Company, 1920.

There was a time when X-radiance was applicable only to bone work and even yet this opinion is found in surprisingly "high places." Very recently a physician expressed surprise at the temerity of an X-ray man who gave an opinion regarding the presence or absence of a certain organic heart lesion from radiographical findings. This individual would stand aghast at the contents of the above named volume. The keynote of the whole book seems to be the interpretation of the pathology of pulmonary tuberculosis as expressed by the resulting changes in densities. The author rightly assumes that an increased knowledge of the pathology of the condition is necessary for all of us and gives a discussion on this subject which is superior to that found in most of our standard texts on pathology. This alone would make the volume worth while.

The illustrations are good and usable, in that they do not show the customary obvious conditions but, rather, emphasis is placed on the doubtful conditions which occur at a time when diagnosis can aid most efficiently in therapeutics. Nearly all of the plates are accompanied by case reports and a great many of them by autopsy findings with particular emphasis upon checking up of the radiographical findings.

The book will be of great aid to all who are treating diseases of the chest, and practically every radiologist will find it to be a mine of practical information.

Earl R. Hoskins.

Psychopathology. By Edward J. Kempf, M.D., Clinical Psychiatrist to St. Elizabeth's Hospital (Formerly Government Hospital for the Insane), Washington, D. C.; Author of "The Autonomic Functions and the Personality." Cloth. Price, $9.50. Pp. 762. St. Louis: C. V. Mosby Company, 1920.

This is a book that should prove of distinct aid to every physician, not alone to the psychiatrist, who desires an insight into the complex problem of abnormal behavior. To sketch the

dividing line between normal and abnormal human behavior has long been fraught with difficulties owing to the many-sidedness and overlapping of the various factors that enter into the problem.

The author approaches the subject of mental disease from the dynamic biological concept. His viewpoint of personality is a monistic biological one, which does not assume that the mind and body are distinct from one another. This concept is different from that of the Kraepelinian method of classifying cases into symptomatological groups. The Freudian viewpoint is that the **wish** is the dynamic factor in personality, yet this concept does not explain the physiology of the repressed wish.

The first step toward an understanding of the physiological basis of the author's concept is an appreciation of the integrative action of the nervous system, on the postural tonus of muscle and nerve, and on the proprioceptive system especially in its reflex aspects. He believes that all emotions, sentiments and hungers are due to peripheral activities, that explains the physiological or rather autonomic sources of all the wishes, emotions and sentiments of the personality.

"The neutralization theory of the dynamic or autonomic mechanism of the personality is as follows: The different segments of the autonomic apparatus are stimulated to assume different types of postural tensions and activities, which give rise to an effective nervous stream, which, in turn, co-ordinates the proficient apparatus and compels it to act so as to expose the receptors of the organism so that they will acquire certain types of stimuli and avoid others. The stimuli which must be acquired in order to avoid prolonged unrest and distress, which may become decidedly malnutritional in their influence must have the capacity to counter-stimulate the autonomic segment so that it will resume a state of comfortable tonus. We find this occurs in hunger, fear, hate, love, shame, jealousy, sorrow, eroticism, etc. This law of compulsion by the segment to seek counter-stimulation and neutralization of its craving seems to be to me to be the physiology of the wish and the fundamental dynamic principle of all behavior; and not until this law and its physiology are understood and applied can normal or abnormal behavior be really understood."

He believes that: "The whole parallelistic issue is completely avoided if the student will but learn to see that consciousness and the content of consciousness is the reaction of the body as a unity to the sensational activity of one or several of its parts. And when toxins, injuries fatigue, etc., prevent the segments from integrating into a unity, consciousness of the activities of a part disappears, as when passing under a general anesthetic or going to sleep."

A large portion of the volume is given to a plain discussion of cases and the difficulties encountered of various types of mental disorder. The work has been carefully written and ends with an enlightening chapter on pyschotherapeutic principles.

The Major Symptoms of Hysteria: Fifteen Lectures Given in the Medical School of Harvard University. By Pierre Janet, Ph. D., M.D., Member of the Institute of France; Professor of Psychology in the College De France. Second Edition with new matter. Cloth. Pp. 345. New York: The Macmillan Company, 1920.

It seems hardly necessary to recommend this new edition, for the original volume was kindly received and widely read. To the student and practitioner, this is a book that can be classed as both instructive and entertaining. This new edition has been corrected and brought up to date. Those who have not had the pleasure of studying this series of lectures we would unhesitatingly advise them to do so at the first opportunity.

STATE AND LOCAL SOCIETIES

California

Dr. Frank Farmer addressed the members of the Los Angeles County Osteopathic Society on January 10th, at its regular monthly dinner at the University Club. Doctor Farmer's subject was "Recent Discoveries in the Treatment of Disease Through Basal Metabolism Findings." He was recently appointed chief of the metabolism clinic of the College of Osteopathic Physicians and Surgeons here. Dr. R. D. Emery, president of the society, was chairman of the meeting, which was attended by more than a hundred osteopaths of the county.

Illinois

The Second District osteopathic meeting was held on Thursday, January, 6, in Freeport, at the Senate Hotel, following a one o'clock luncheon. The program included:

"Tonsillitis," Dr. Margaret Loring, followed by a general discussion; "Differential Diagnosis of Pain," Dr. D. H. Hardie; Technique, by volunteer demonstrators; Legislation, open discussion; "Hiccough, Grip," general discussion.

The next meeting will be held in Rockford, Thursday, May 5.

Iowa

Wednesday, December 15, saw the permanent organization of the Des Moines Still College of Osteopathy Auxiliary to the American Osteopathic Association, with H. K. McDowell, president; T. M. Patrick, vice-president; B. M. Hudson, secretary, and Charles

McMullin, treasurer. Every student of the college is enrolled as a member of the organization and it is the intention of the students to bring osteopathy and osteopathic principles to the fore as well as to boost their Alma Mater.

Aside from the regular officers each class president is a member of the advisory board. This board, according to the constitution, has the power to call meetings and pass upon all matters pertaining to the conduct of the organization. As an added attraction the constitution proposed the appointment of a program committee, an employment committee and publicity chairman. Miss Marjorie Law was named by the advisory board on the first named committee, Emmett Schaffer as chairman of the employment committee and E. J. Lawder as publicity chairman. Each chairman will select members of the student body to cooperate with him in his particular line of work.

Dr. Ray Gilmore, of Sioux City, Ia., and Dr. C. J. Christensen, of Keokuk, Ia., were present for a few moments at the installation of officers. Dr. Christensen told the student body what was being done by the state organization relative to the legislative program in the State and Dr. Gilmore spoke on the good to be derived from a membership in the Auxiliary.

This is the first year D. M. S. C. O. has had a football team in the field in several years. While the boys were not as victorious as could be desired, nevertheless the school received much publicity that was a boost for osteopathy. This year will see an excellent basketball team representing the institution. The school spirit is manifest at D. M. S. C. O. in a way which has caused the older students and members of the faculty to figuratively "sit up and take notice." Readers of the Journal may prepare to hear more from the school located in the center of the world's greatest corn raising State.

Kansas

Officers were elected as follows at the first meeting of the year of the Montgomery County Association in the office of Dr. L. G. Fite at Coffeyville, January 11: Dr. L. G. Fite, president; Dr. Mary Bell, secretary and treasurer. Dr. C. M. Wyatte was appointed chairman of the publicity committee, and Drs. Brann, Freeland and DuMars as program committee. Dr. Mary Bell read a paper on pneumonia and a discussion followed. Before the meeting Dr. Brann held a clinic and removed a pair of tonsils by the Ruddy method.

Maryland

At a call meeting of the Maryland osteopaths on January 19, in Baltimore, a re-organization of the Maryland Osteopathic Association was effected and the following were elected to office for the term ending October, 1921, or until their successors have been chosen and installed in office: Dr. Henry A. McMains, president; Dr. W. S. Heatwole, vice-president; Dr. Hugh D. Spence, secretary-treasurer. Dr. E. L. Schmid was elected a member of the executive board. Since the meeting Dr. Spence has found that he cannot attend to the duties of secretary-treasurer, and correspondence should be addressd to Dr. McMains at 516 Park Avenue, Baltimore. The Maryland Legislature is not in session this year but Dr. H. V. Carter of Baltimore, is legislative chairman for the association and is keeping in touch with State and national legislative matters.

Maine

A movement has been started for the organization of a Central Maine Osteopathic Society which will include as members the osteopaths in Augusta, Waterville, Skowhegan, Auburn, Lewiston, with possibly Rockland and Dexter.

Massachusetts

At the annual meeting of the Massachusetts Osteopathic Society in Boston, on January 4, the following officers were elected: Dr. R. Kendrick Smith, Boston, president; Dr. Myron P. Barstow, Boston, vice-president; Dr. E. Laura Meader, Lynn, secretary; Dr. Peter J. Wright, Hyde Park, treasurer.

The Boston O. S., Massachusetts, held its January meeting Tuesday, the 18th at 6.45 P. M., at the Hotel Lenox. The following was the program for the evening:

Dinner was served, a la carte, at six o'clock for all those who wished to have dinner with Dr. H. W. Conklin. Business meeting followed. A vote was taken to change the dues from $2.00 to $5.00. It was carried.

The meeting was then adjourned to Huntington Hall where Dr. Conklin of Battle Creek, Mich., gave a public lecture entitled, "Food from the Body to the Tissues."

New York

At the January meeting of the New York City O. S. in the Blue and Gold Room of the Hotel Plaza on Saturday evening, the 15th. W. Strother Jones spoke on "Clinic, Past, Present and Future"; Dr. H. W. Conklin read a paper on "Diabetes," which was followed by a discussion and Dr. W. A. Merkley spoke on "Dorsal Technique." Dr. Conklin and Mr. Jones were guests at the informal dinner before the meeting.

Dr. Royal S. Copeland, Commissioner of Health of the city, will speak at the February meeting on "Health and Housing." The society is planning to make this a banner meeting.

Ohio

A new association has been formed by the osteopaths in northwestern Ohio outside of Toledo, who have adopted the name formerly used by the profession local to Toledo, Northwestern Ohio Osteopathic Association. The officers of the new organization, which will meet the second Thursday of each month, are: F. H. Gautschi, president; Dr. R. O. Buck, vice-president; Dr. D. J. Clark, secretary; Dr. Edmund Grothouse, treasurer.

Ontario

A delegation from the Ontario Association of Osteopathy recently called on the provincial cabinet and asked the co-operation of the government in introducing a new medical bill, the purpose of which is "to safeguard the rights and privileges of the people of the province in securing adequate, safe and sane medical attendance in all cases of sickness by practitioners of the medical school or schools which they may desire to employ." Premier Drury said he would take the representations made into consideration.

The seventh annual meeting of the Western Ontario O. A. took place at Brantford, December 9th, at the Bank of Hamilton Chambers, Pres. C. H. Sander in the chair. The following officers were elected:

President, Dr. H. W. Sutton; vice-president, Dr. Rebecca Harkins; secretary-treasurer, Dr. C. R. Merrill; trustees, Dr. E. S. Detwiler, Dr. G. V. Hilborn, Dr. J. R. Witham.

The program put on was well discussed. "The Public Library as a Purveyor of Disease or of Health," Dr. C. H. Sander; "Endocrinology"—A Study and Review, Dr. E. S. Detwiler; "Neurasthenia," Dr. H. W. Sutton; "Focal Infections, Clinical Side," Dr. G. V. Hilborn; "The Osteopath's Reading Table," Dr. C. R. Merrill.

NOTES AND PERSONALS

Osteopaths in City Hospitals

The following communication appeared in a recent issue of the Spokane (Wash.) Spokesman-Review:

To the Editor of the Spokesman-Review: Less than two years ago my daughter was treated by an osteopath in one of our hospitals. Everything was harmonious and we enjoyed every courtesy.

Last week an osteopath who has practiced in that hospital for fifteen years was ordered out and told that nobody but medical doctors can practice there.

I am not making a plea for the osteopaths, but would like to know what sort of a joke the authorities have played on that part of the public who do not favor drug therapy.

We were solicited in the late drives. We sacrificed and gave money we could ill afford to under the impression that we should have the privileges of the past, but it seems we were buncoed. Evidently the black hand of the American Medical Association has laid hold of

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the hospitals in our city which were built by the people.

Nobody would dispute the right of the medical profession to restrict practice in hospitals of their own, but when did the builders of our three largest hospitals present them to the medics?

Moreover, are we in duty bound to fulfil our pledges to those hospitals when we know that we are not to be allowed the privileges of the hospitals?

CHARLES A. WHITE.

SPOKANE.

Osteopathic Efficiency

In the course of an address on "Attaining and Maintaining Osteopathic Efficiency" at the January meeting of the Kings County (Seattle) O. S., Dr. A. B. Ford said:

"If an efficiency expert should survey our activities and institutions, his report would show many defects, leaks, lost motion, duplications and irritations, and that an outsider, reading the report would wonder in amazement that we are able to make progress at all." He asks, "Are Osteopathic schools as large, prosperous, independent and influential as you had hoped they could be after twenty-five or thirty years of development?" "Does our equipment as general practitioners or a profession, come up to even the reasonable expectations of those who were our friends—the friends of osteopathy, say fifteen or twenty years ago?"

"If the A. M. A. had standardized their hospitals fifteen years ago, osteopathy would have been much farther ahead today, we must either stand on our own feet and become a complete, independent school of medicine or drop back and content ourselves by becoming a near adjunct to the medical profession."

Ohio Examinations for Chiropractors

The legislature in 1915 amended the medical law by providing an examination under the State Medical Board for chiropractors in all the fundamental branches. Up to December of last year, no chiropractor even applied for a license through that means, preferring rather to practice in violation of law, trusting that the courts would declare the law unconstitutional. But at the last examination one lone man appeared., He turned in one paper—chemistry—and made a grade of 23 per cent.

The case in the supreme Court is set for February 18th, the lower courts having all decided in favor of the law.

Four new applicants for osteopathic license passed the December examination, including surgery.

M. F. HULETT, B.S., D.O.

Appeal to Shriners

To all Nobles of the Mystic Shrine:

Greetings

An assessment has been made upon all shriners to establish hospitals for crippled children. This is a very worthy object, and one which can well be maintained by the order. However, there are many members of the Shrine who are for medical liberty, for the right to consult whatever school of medicine they choose. It is their right and duty in paying the assessment to enter a protest to his temple that this new institution or institutions be made open to *all schools* of medicine, and the crippled to be taken care of shall have *every* possible benefit of medical science and *not* that advocated by the one school, allopathy.

This is a request for all nobles, osteopathic, Christian scientist, homeopathic, eclectic and otherwise to not only register their own suggestion and request for an *open institution*, but to have your patients and friends do likewise.

NOBLE, O. C. FOREMAN, D.O.

CHICAGO, ILL.

New Osteopathic Hospital

Having been barred from the hospitals of Indianapolis. Drs. Clark and Blakeslee of that city, have bought a residence which is being converted into a hospital especially adapted to maternity and orthopedic work. The new institution has twenty beds and has started business with a favorable outlook as an osteopathic enterprise.

Personals

Dr Grace Wilkes and small son from Los Angeles are guests of Seattle friends.

Dr. Hattie Slaughter is taking a vacation trip to Denver, enjoying stops enroute, meeting old time friends and patients.

Dr. F. P. Millard of Toronto spent a few days the first of the year at Algonquin Park of Ontario snow-shoeing and skiing. A decided change from a strenuous practice is unquestionably the best method for recuperation.

Dr. Emma Wing Thompson of Schenectady, N. Y., successfully passed the recent Washington State Examinations and will locate in the Pudget Sound Country.

Dr. F. B. Teter of Davenport, Wash., represents the Sixteenth District in the House of Representatives, this is his second term in that capacity. He is chairman of Committee of Medicine, Dentistry, and Hygiene, also a member of Committees on Public Morals, Education. Taxation and Finance.

Dr. Teter does all this in spite of the handicap of total blindness, besides owning a large hospital and sanitarium, and conducting an extensive practice in his home town.

Dr. Dayton B. Holcomb announces that he has opened an office at 745 North Los Robles, Pasadena, California, and has installed complete equipment for his special work for ptosis (Glenard's disease). His friends will be glad to know that after an interval of three months he is ready to go on with his work and push osteopathy harder than ever.

Dr. Carrie B. Stewart announces the removal of her offices from Detroit to 410 East Jefferson Street. Ann Arbor. Michigan.

Dr. F. E. Dayton of Escanaba, Mich., was the guest on January 12th of the osteopaths of Binghamton, N. Y., and gave a talk on the reduction of sacro-iliac lesions under anesthesia.

Married

Dr. J. E. Fisher, A. S. O., '19, was married November 25th to Miss Glida Park, at Sherman, N. Y. Dr. Fisher is practicing at Kingsport, Tenn.

Born

To Dr. & Mrs. G. E. Morris of Clarksburg, W. Va., December 23rd, a son, Guy Edmund, Jr. Dr. Morris is Secretary-Treasurer of the West Virginia Osteopathic Society.

To Drs. Clarence J. W. and Birdice E. F. Beal on December 4, at their home, 204 West Seventieth street, New York City, a son, Myron C.

To Drs. Theodore and Gladys Thompson, on November 24th, a daughter, Rebecca Eileen, at the Pennsylvania Osteopathic Sanatorium, York, Pa.

Died

The wife of Dr. T. E. Childress of Durango, Colo., died there of pulmonary tuberculosis on January 1. She was thirty-six years old. Interment was at Greensburg, Mo.

At her home in Montclair, N. J., on November 5, Mrs. Myron E. Flint, mother of Dr. Birdice E. F. Beal.

APPLICATIONS FOR MEMBERSHIP

Alabama

Bond, Leonora (A. S. O.), Farley Building, Birmingham.

Arkansas

Crews, Gena L., Blytheville.

California

Bashor, Ernest G. (L.A.), Ferguson Bldg., Los Angeles.
Morgan, Gwladys M. (L. A.), Sprechels Bldg., San Diego.

Connecticut

Perry, Florence J., 902 Main St., Hartford.

Illinois

Andrews, E. C. (A), Armory Blk., Ottawa.
Dunseth, Roy C. (A. S. O.), 322 E. Main St., Streator.
Mansfield, B. P., DeKalb.

Indiana

Troyer, Herbert B. (A), 19½ E. Washington St., Greencastle.

Kansas

Fite, L. G. (A), Columbia Bldg., Coffeyville.

Maine

Parker, Edward A. (A. S. O.), 96 Water St., Skowhegan.

Minnesota

Couplin, A. C. ( ), Hamm Bldg., St. Paul.

Missouri

Crews, Lena L. (A. S. O.) Bertig Building, Blytheville
Froeschle, Harry B. (Ch), 7033 Marquette Ave., St. Louis.
Gahan, E. J. (A. S. O.), Perryville.
Lipman, Herbert (A), Altman Bldg., Kansas City.

Nebraska

Ringler, Frances B. (A), Neville Blk., Omaha.

New Jersey

Grant, Roswell D. (A. S. O.), 137 W. Palisade Avenue, Englewood.

New York

Kellam, Lawrence J. (Ch), Press Bldg., Binghampton.

Texas

Tarr, Alfred J. (A. S. O.), Wilson Building, Dallas.

Washington

Coon, A. S. (A. S. O.), Garfield.
Coon, Mary E. (A. S. O), Garfield.
Cunningham, Arthur B (A. S. O.), Leary Bldg., Seattle.
DuBois, R. O. (L. A.), State Bldg., Centralia.
Walker, J. LeRoy (A. S. O.), 2 N. 8th Street, Yakima.

Wisconsin

Lyman, Elva J. (A. S. O.), 213 N. Hamilton Street, Madison.

Canada

O'Connor, John J. Jr. (A. S. O.), Brass Bldg., Toronto, Ont.

CHANGES OF ADDRESS

Bassett, V. C., from Horton, to Holton, Kans.
Berger, Grace C., from 2626 Broadway, to 4 W. 50th St., New York City.
Borton, S., from Golden Ill., to Damascus, Ohio.
Hewger, D. E., from Fremont, Nebr., to 153 Institute Pl., Chicago, Ill.
Holcomb, Dayton B., from Chicago, Ill., to 745 N. Los Robles, Pasadena, Calif.
Howe, Waldo S., from Carthage, N. Y., to 11th and Harrison, Kansas City, Mo.
Keeler, B. H., from Morristown & Philadelphia, to 13 Forest Rd., Fairwoods, at Madison, N. J.
Lundborg, Eunice Elder, from Belleville, Wis., to Hotel Metropole, Chicago, Ill.
Magner, Ellen, from 1030 Nicollet Ave., to 1601 Park Ave., Minneapolis, Minn.
Neame, Josephine E., from Dinuba, to Santa Barbara, Calif.
Peterson, Byron S., from Brandeis Bldg., to Omaha Nat'l Bk. Bldg., Omaha, Nebr.
Slocum, Howard I., from Barre, to Middlebury, Vt.
Tweed, Homer N., from Linwood, to 801 E. Ohio St., Bay City, Mich.
Wheeler, Glenn B., from 52 Bagg St., to 88 Temple Ave., Detroit, Mich.